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TWISTED PAIR

Telco

FIBER

Network Products Catalog



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CommScope Mission Statement...

“To be a leading global producer of high-performance broadband communication cables and related components to providers and owners of communications infrastructure. We will be recognized for the superior quality and performance of our products, service to our customers, quality of our employees and value to our stockholders.”

Frank M. Drendel, Chairman and Chief Executive Officer

Brian D. Garrett, President and Chief Operating Officer

CommScope is a leading manufacturer of high speed, high bandwidth, coaxial, twisted pair, and fiber optic cables for voice, data, and video applications. As the world's largest producer of coaxial cable, CommScope is the single manufacturer capable of producing a complete line of coaxial, twisted pair, and fiber optic cable solutions for commercial and residential telecommunications requirements. www.commscope.com

All communication signals need both long distance transmission and some type of “last mile” connection between information senders and receivers. This “last mile” can be wired or wireless, and CommScope provides a key enabling technology needed to allow broadband connections which need to be made as clearly and rapidly as possible. Without broadband cables such as ours, the Internet might still be confined only to universities and government installations. Businesses might still depend solely upon paper interoffice memos. Telephones might only work when attached to a wall outlet. Television reception might still require rabbit ear antennae.

CommScope offers quality service. Our network of more than 100 sales personnel worldwide works closely with our Customer Service Department to serve our customers, who are never more than a phone call away from receiving the best possible information available.

We even have our own trucking fleet of delivery trucks capable of delivering most CommScope products anywhere within the continental U.S. Cable Transport, Inc. is based at the Catawba facility and numbers approximately 100 tractors and 290 trailers - 125 of which are fitted with cargo-lifting equipment.

To serve as a service and manufacturing facility for our Western US customers, we recently established a West Coast warehouse and Cable-In-Conduit manufacturing facility in Sparks, Nevada.



In Europe, our Belgium cable facility in Seneffe also serves as a distribution, sales and customer service facility for the world market, as well as our Jaguariúna, Brazil facility.

With more than 120 patents and patent applications, product innovation is clearly a CommScope trademark. In fact, a large proportion of our sales come from proprietary products, enhancing our technological leadership position within our industry.

CommScope manufactures a variety of twisted pair, coaxial and fiber optic cables to transmit data for Local Area Network applications. The most widely used cable design for this application consists of four high-performance twisted pairs that are capable of transmitting data at rates in excess of 100 mbps. Copper and fiber optic composite cables are frequently combined in a single cable to reduce installation costs and support multi-media applications.



UltraMedia™ and UltraPipe™ use our Unshielded Twisted Pair (UTP) cable technology to serve the high-speed Local Area Network (LAN) cable market. CommScope LAN products are among the highest-performing twisted pair and fiber optic cables on the market.

Our technology award-winning UltraFiber™ fiber optic product is the longest distance and highest bandwidth 62.5 micron fiber currently on the market. It allows our customers to avoid typical distance limitation problems without having to re-cable.

We also produce specialized high-performance communications cables to serve the Broadcast, Satellite, Video, Home Automation, Industrial, and Security markets. The UltraHome® family consists of single, siamese, and bundled designs constructed of Category 5e unshielded twisted pair (UTP), coaxial cable, multimode fiber, and speaker cable options. UltraHome provides residential customers a structure for computer networking, whole house entertainment, energy management, telephone systems, cable TV, and intercom systems applications.

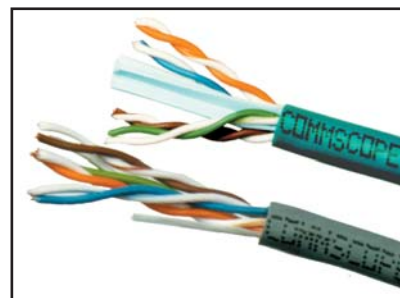
CommScope specifies and purchases uncabled single mode and multimode optical fibers, and we design and manufacture a complete product line of Outside Plant (OSP) and premises fiber optic cables. Steel armored and all-dielectric designs are available up to 288 fibers as well as unique cable designs including Fiber Feeder® and Triathlon® indoor-outdoor cables.

CommScope manufactures DS 3/4 coaxial products used in central offices and data centers that meet and exceed Telcordia (Bellcore) standards.

The world leader in coax invites you to specify CommScope quality and experience it with your next installation. You'll see why CommScope is the preferred cable for communication the world over.

CommScope. How Intelligence Travels!

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March
1992

CommScope delivers **Quantum 100**, the first enhanced performance Category 5 cable in the industry.

February
1994

CommScope releases the **Ultra** UTP cable specified to 350 MHz.

August
1993

CommScope is the first to attach certified test reports to every reel of enhanced Category 5 cable.

January
1995

CommScope is the first to provide 4-pair cables that are PowerSum NEXT compliant.

May
1996

CommScope introduces the **Ultra II** family of enhanced Category 5 cables that exceed 568A standards.

April
1998

CommScope introduces **UltraMedia** - an advanced cable technology that exceeds Category 6 and is designed for applications beyond 1 gigabit.

August
1996

CommScope begins production of ISO/IEC 11801-compliant cables.

January
1997

CommScope responds to industry demand with the first outdoor-rated Category 5.

April
1998

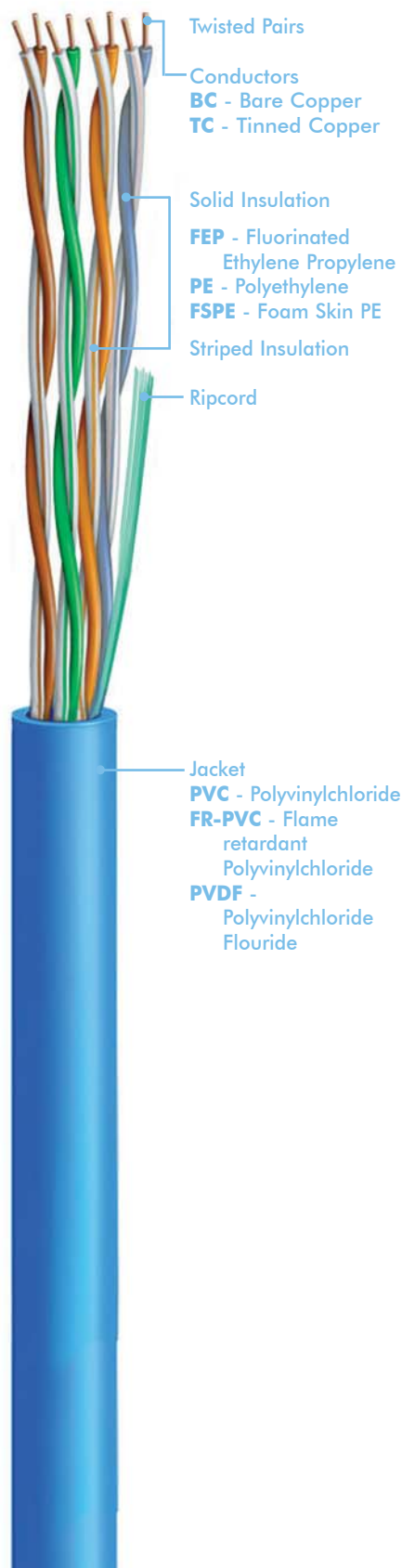
CommScope introduces **Isolite™** foamed UTP insulation that improves the installation, termination and profitability of your next job.

July
2000

CommScope introduces **UltraPipe™** Cat 6e+ cables, defining a new level in performance exceeding standard Cat 6 specifications and providing superior bandwidth performance up to 550 MHz.

July
1998

CommScope introduces the **Isolator™** pair separator that maximizes pair separation and minimizes pair motion.



UltraPipe™ Category 6e Cable

Introduced in 2000, UltraPipe is the next evolution in unshielded twisted pair products. UltraPipe exceeds proposed Category 6 specifications and provides superior bandwidth performance up to 550 MHz to support broadband video and high-speed, full duplex transmission protocols.

UltraMedia™ Category 6 Cable

Introduced in 1998, UltraMedia is designed to exceed all proposed Category 6 requirements for high-speed, full-duplex, parallel transmission protocols. The revolutionary patented Isolator™ maximizes pair separation and minimizes pair motion resulting in superior NEXT, ELFEXT, and RL performance to 400MHz. Typical applications include high-speed digital voice, video and data, such as 3D imaging, broadband video, gigabit Ethernet, and 155/622Mb/s ATM.

Ultra II™ Category 5e "PLUS" Cable

First released in 1996, the Ultra II family was designed with the future in mind. A 350MHz Enhanced Category 5e UTP cable that provides guaranteed "headroom" over today's current 5e standards. Ultra II incorporated superior isolation and return loss with low insertion loss, <15ns in Delay Skew, and ISO/IEC 11801 input impedance compliant.

DataPipe™ Category 5e Cable

Often referred to as addendum 5, Category 5e was developed for simultaneous bi-directional transmission over 4-pairs. Improvements to Category 5 were made and additional electrical requirements such as power sum NEXT, equal level far-end crosstalk, power sum equal level far-end crosstalk, and return loss were added to create the 5e specification. Typical applications include those of Category 5 and full duplex encoding schemes such as gigabit Ethernet (1000 Base T).

Category 5 Cable

Established by the telecommunications industry association and first published in ANSI/EIA/TIA-568 in 1991, the Category 5 designation applies to 100Ω unshielded twisted pair cables and associated connecting hardware whose transmission characteristics are specified up to 100MHz. Available from one to twenty-five pairs, typical applications range from voice to 155Mb/s, Fast Ethernet, ATM, TPDDI, CDDI, TP-PMD, 100 Base T.

Highest Performance UTP Cable Available with improved:

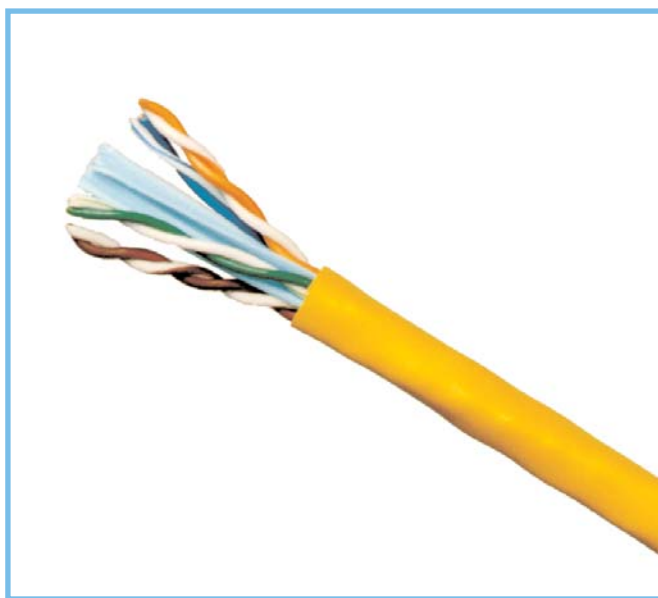
- **Attenuation**
- **Crosstalk**
- **Return Loss**

Introducing UltraPipe, the next evolution in Unshielded Twisted Pair (UTP).

UltraPipe exceeds all proposed Category 6 specifications and provides superior bandwidth performance up to 550Mhz to support broadband video and high-speed, full-duplex transmission protocols.

UltraPipe offers a 60% improvement in signal strength by providing a 2db improvement in attenuation over proposed Category 6 cable. UltraPipe also offers a 300% improvement in PowerSum crosstalk performance, critical for Gigabit Ethernet networks. UltraPipe has a 25% improvement in return loss over proposed Category 6, maximizing cable balance and minimizing echo to improve overall channel performance.

UltraPipe's patented design includes the revolutionary Isolator™ pair separator, which resolves NEXT and ELFEXT issues required for accurate transmission using all four pairs.



UltraPipe is THE Choice for Critical Network Applications.

Electrical Performance of UltraPipe

Frequency MHz	ATTENUATION (dB/100m)			NEAR END CROSSTALK (dB)			ACR (dB/100m)		POWER SUM (dB)						ELFEXT (dB/100m)		Return Loss (dB)		
	CommScope Max		TIA/EIA 568 Cat. 6	CommScope Min		TIA/EIA 568 Cat. 6	Min		NEXT Min		ELFEXT Min		ACR Min		Min		CS Min		EIA/TIA 568 Category 6
	UltraPipe	6EJCM		UltraPipe	6EJCM		UltraPipe	6EJCM	UltraPipe	6EJCM	UltraPipe	6EJCM	UltraPipe	6EJCM	UltraPipe	6EJCM	UltraPipe	6EJCM	
1.0	2.0	2.4	2.0	80.3	74.3	74.3	78.3	71.9	78.3	72.3	70.8	66.8	76.3	69.9	74.8	69.8	23.0	24.0	20.0
4.0	3.8	4.5	3.8	71.3	65.3	66.3	67.5	60.7	69.3	63.3	58.8	54.7	65.5	58.7	62.8	57.8	23.6	24.6	23.0
8.0	5.3	6.4	5.3	66.8	60.8	60.8	61.5	54.4	64.8	58.8	52.7	48.7	59.5	52.4	56.7	51.7	25.4	26.4	24.5
10.0	5.9	7.1	6.0	65.3	59.3	59.3	59.4	52.2	63.3	57.3	50.8	46.8	57.4	50.2	54.8	49.8	26.0	27.0	25.0
16.0	7.4	9.1	7.6	62.2	56.2	56.3	54.8	47.2	60.2	54.2	46.7	42.7	52.8	45.2	50.7	45.7	26.0	27.0	25.0
20.0	8.3	10.2	8.5	60.8	54.8	54.8	52.5	44.6	58.8	52.8	44.7	40.7	50.5	42.6	48.8	43.8	26.0	27.0	25.0
25.0	9.3	11.4	9.5	59.3	53.3	53.3	50.0	41.9	57.3	51.3	42.8	38.8	48.0	39.9	46.8	41.8	25.5	26.5	24.3
31.25	10.4	12.8	10.7	57.9	51.9	51.9	47.4	39.1	55.9	49.9	40.9	36.9	45.4	37.1	44.9	39.9	25.0	26.0	23.6
62.5	14.9	18.5	15.4	53.4	47.4	47.4	38.5	28.9	51.4	45.4	34.8	30.8	36.5	26.9	38.9	33.9	23.5	24.5	21.5
100.0	19.0	23.8	19.8	50.3	44.3	44.3	31.3	20.5	48.3	42.3	30.8	26.8	29.3	18.5	34.8	29.8	23.0	24.0	20.1
155.0	23.9	30.2	25.2	47.4	41.4	41.5	23.5	11.3	45.4	39.4	26.9	22.9	21.5	9.3	31.0	26.0	21.6	22.6	18.8
200.0	27.4	34.8	29.0	45.8	39.8	39.8	18.4	5.0	43.8	37.8	24.7	20.7	16.4	3.0	28.8	23.8	21.0	22.0	18.0
250.0	30.8	39.4	32.8	44.3	38.3	38.3	13.5	-1.1	42.3	36.3	22.8	18.8	11.5	-3.1	26.8	21.8	20.5	21.5	17.3
300.0	34.0	43.7		43.1	37.1		9.1	-6.6	41.1	35.1	21.2	17.2	7.1	-8.6	25.3	20.3	20.1	21.1	
350.0	37.0			42.1			5.2		40.1		19.9		3.2		23.9		19.8		
400.0	39.7			41.3			1.5		39.3		18.7		-0.5		22.8		16.9		
550.0	47.3			39.2			-8.1		37.2		15.9		-10.1		20.0		15.9		


Applications: Broadband video, Gigabit Ethernet, 155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet

Exceeds: ANSI/TIA/EIA-568-B.2-1 Category 6, CENELEC EN50173, ICEA S-90-661, NEMA Low-loss Extended Frequency, AS/NZS 3085.1, ISO/IEC 11801 and TIA/EIA PN-4657


Features: Patented design with Isolator™ pair separator for superior PSUM crosstalk performance
Flexible jacket with ripcord strips cleanly and resists kinking
Coextruded color striped pairs for easy identification

Test Report: Test report attached to each package at no additional cost

Plenum


Catalog Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance nF/100m	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
6ECMP	4	23 AWG Solid BC	3prs: FEP .008/.20 1pr: PE .008/.20	CommFlex FR-PVC .019/.48	.250/6.3 CommScope green, white, blue, yellow, and gray	4.6	100Ω ± 15%	20.3Ω/kft 6.7Ω/100m	71%	27.5/90
										
ETL CMP/C(ETL) CMP										

Non-plenum

Catalog Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance nF/100m	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
6ECMR	4	23 AWG Solid BC	PE .008/.20	PVC .024/.61	.240/6.0 White, blue, yellow, and gray	4.6	100Ω ± 15%	20.3Ω/kft 6.7Ω/100m	68%	25.6/84
										
ETL CMR/C(ETL) CMG										

Available in CMX for International use.

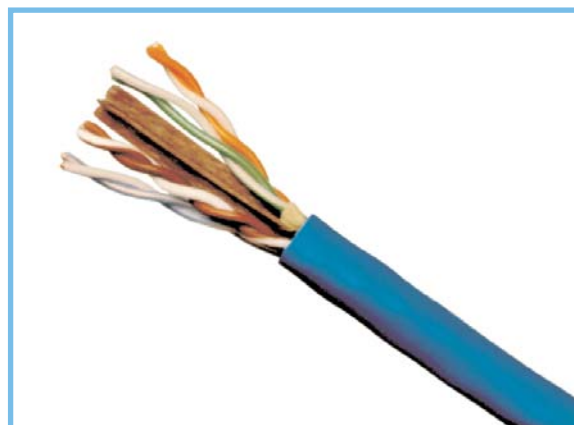
Patch Cable Swept to 300 MHz

Catalog Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance nF/100m	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
6EJCM	4	24 AWG Stranded TC	PE .007/.19	Flame-retardant PVC .020/.51	.218/5.5 Gray and white	4.6	100Ω ± 15%	20.3Ω/kft 6.7Ω/100m	67%	20.0/66
										
ETL CM/C(ETL) CMG										

CommScope's **UltraMedia** is the extended bandwidth cable that defines the new standard in UTP performance. UltraMedia's improved 400 MHz capability, unmatched ACR, PowerSum NEXT and precision balance make UltraMedia the best-performing UTP cable available.

Engineered specifically for high-speed, full-duplex, parallel transmission protocols that dominate new technologies, UltraMedia's patented design, which includes the revolutionary Isolator™ pair separator, resolves ELFEXT and balance issues required for accurate transmission using all four pairs. Exceeding both ANSI/TIA/EIA 568B.2-1 and ISO/IEC 11801 standards, UltraMedia is the choice for critical network applications.

CommScope proves this performance by individually testing every master reel of UltraMedia cable and attaching the test report to each reel - a procedure we pioneered and will continue free of charge.



Parameter	UltraMedia Performance	vs. Cat 6 568B Standard
Specified Frequency	400 Mhz	60% improvement
Maximum Skew	≤25 ns	300% improvement
PSUM ELFEXT	1 dB @ 200 MHz	25% improvement
Capacitance Unbalance	58.2 pF max @ 23°C	500% improvement
Elfext	1dB @ 200 MHz	25% improvement

Electrical Performance of UltraMedia vs. ANSI/TIA/EIA Category 6

Frequency MHz	Attenuation max dB/100m		Near End Crosstalk (NEXT) min/ave dB		Attenuation to Crosstalk (ACR)			PowerSum NEXT min/ave dB		PowerSum ACR			ELFEXT		PSUM ELFEXT dB		RL	
	UltraMedia	6NF4	UltraMedia	6NF4	UltraMedia min/ave dB	6NF4 min/ave dB	vs. TIA/EIA Cat 6 min dB	UltraMedia	6NF4	UltraMedia min/ave dB	6NF4 min/ave dB	vs. TIA/EIA Cat 6 min dB	min dB	6NF4	UltraMedia	6NF4	UltraMedia	6NF4
1	2.0	2.0	75.3/84	74.3/84	73.3/82	72.3/82	vs. 72	73.3/77	72.3/77	71.3/76	70.3/76	vs. 70	68.8	67.8	65.8	64.8	23.0	23.0
4	3.8	3.8	66.3/83	65.3/83	62.5/80	61.5/80	vs. 61	64.3/75	63.3/75	60.5/73	59.5/73	vs. 59	56.8	55.8	53.7	52.8	23.6	23.0
8	5.3	5.3	61.8/80	60.8/80	56.5/75	55.4/75	vs. 55	59.8/72	58.8/72	54.5/68	53.4/68	vs. 53	50.7	49.7	47.7	46.7	25.4	24.5
10	5.9	6.0	60.3/79	59.3/79	54.4/73	53.3/73	vs. 53	58.3/70	57.3/70	52.4/65	51.3/65	vs. 51	48.8	47.8	45.8	44.8	26.0	25.0
16	7.5	7.6	57.2/76	56.2/76	49.7/68	48.7/68	vs. 49	55.3/68	54.2/68	47.7/61	46.7/61	vs. 47	44.7	43.7	41.7	40.7	26.0	25.0
20	8.4	8.5	55.8/74	54.8/74	47.4/65	46.3/65	vs. 46	53.8/65	52.8/65	45.4/59	44.3/59	vs. 44	42.8	41.8	39.7	38.8	26.0	25.0
25	9.4	9.5	54.3/73	53.3/73	44.9/64	43.8/64	vs. 44	52.3/64	51.3/64	42.9/56	41.8/56	vs. 42	40.8	39.8	37.8	36.8	25.5	24.3
31.25	10.6	10.7	52.9/71	51.9/71	42.3/60	41.2/60	vs. 41	50.9/63	49.9/63	40.3/54	39.2/54	vs. 39	38.9	37.9	35.9	34.9	25.0	23.6
62.5	15.3	15.4	48.4/69	47.4/69	33.1/53	32.0/53	vs. 32	46.4/60	45.4/60	31.1/45	30.0/45	vs. 30	32.9	31.9	29.8	28.9	23.5	23.0
100	19.7	19.8	45.3/66	44.3/66	25.6/45	24.5/45	vs. 24	43.3/58	42.3/58	23.6/38	22.5/38	vs. 22	28.8	27.8	25.8	24.8	23.0	23.0
155	25.0	25.2	42.4/63	41.4/63	17.5/37	16.3/37	vs. 16	40.5/55	39.4/55	15.5/29	14.3/29	vs. 14	25.0	24.0	21.9	21.0	21.6	18.8
200	28.8	29.0	40.8/62	39.8/62	12.0/32	10.8/32	vs. 10	38.8/53	37.8/53	10.0/23	8.8/23	vs. 8	22.8	21.8	19.7	18.8	21.0	18.0
250	32.6	32.8	39.3/56	38.3/56	6.7/14	5.5/14	vs. 5	37.3/50	36.3/50	4.7/18	3.5/18	vs. 3	20.8	19.8	17.8	16.8	20.5	17.3
300	36.2		38.1/56		2.0/14			36.2/49		0.0/11			19.3		16.2		20.1	
350	39.5		37.1/56		-2.4/14			35.2/47		-4.4/6			17.9		14.9		19.8	
400	42.7		36.3/55		-6.4/9			34.3/46		-8.4/2			16.8		13.7		16.9	

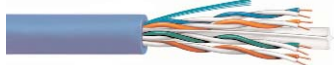
* All values are dB/100 meters unless otherwise noted
Specifications subject to change without notice

Twisted Pair

- Applications:** Broadband video, Gigabit Ethernet, 155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet
- Exceeds/meets:** ANSI/TIA/EIA 568A Category 5e, CENELEC EN50173, ICEA S-90-661, ANSI/TIA/EIA 568-B.2-1 NEMA Low-loss Extended Frequency, AS/NZS 3085.1 and ISO/IEC 11801
- Features:** Patented design with Isolator™ pair separator for superior bandwidth performance
PSUM crosstalk compliant
Flexible jacket with ripcord strips cleanly and resists kinking
Coextruded colorstripe pairs for easy identification
Attached to each reel at no additional cost
- Test report:**


Plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
7504	4	23 AWG Solid BC	3prs: FEP .008/.20 1pr: PE .008/.20	CommFlex .015/.38	.225/6.3 CommScope green, white and blue	14	100Ω ± 15%	20.3Ω/kft 6.7Ω/100m	71%	28/92

 ETL CMP/C(ETL) CMP


Non-plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
75N4	4	23 AWG Solid BC	PE .008/.20	Flame-retardant PVC .020/.51	.240/6.1 White, blue and gray	14	100Ω ± 15%	20.3Ω/kft 6.7Ω/100m	68%	26/85

 ETL CMR/C(ETL) CMG

Outdoor Swept to 250 MHz

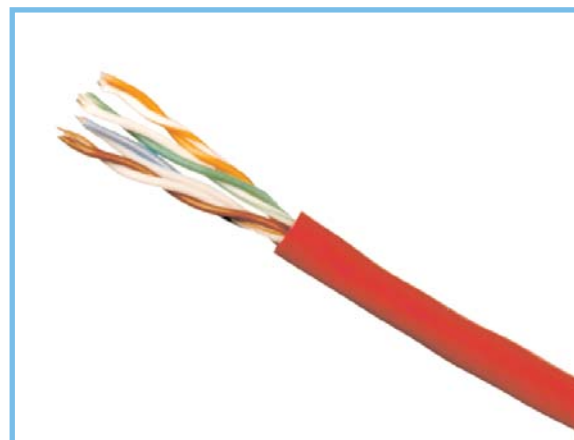
Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
6NF4	4	24 AWG Solid BC	PE .010/.25	PE with Floodant .030/0.76	.232/5.9 Black	14	100Ω + 15%	28.6Ω/kft 9.4Ω/100m	62%	40/131



CommScope's **Ultra II** is the 350MHz Enhanced Category 5e UTP cable that provides guaranteed "headroom" over the ANSI/EIA/TIA 568A, Addendum No. 5 specification. Ultra II incorporates PowerSum NEXT, superior ACR performance, 15 ns Delay Skew and ISO/IEC 11801 impedance to deliver unmatched performance for the demands of high speed, full duplex data networks.

CommScope ensures this performance by attaching a Certified Test Report to every package of Ultra II - a procedure we pioneered and will continue free of charge.

While electrical performance is critical, we believe the physical properties of the cable are also important. Ultra II utilizes CommFlex™ jacketing and a ripcord to improve pulling, handling and stripping. Coextruded stripes and sequential footage markings simplify traceability and termination. In addition, its industry accepted round design does not require special stripping tools, connectors or additional labor. Easier installations = lower costs.



Parameter	Ultra II Performance	Ultra II vs. 568A, Addendum No. 5
Specified Frequency	350 Mhz	250% improvement
ACR/pair-to-pair	>5dB @ 200 MHz > 18dB @ 100 MHz	5dB or 200% improvement
ACR/PowerSum	0dB @ 215 MHz	0dB @ 165MHz or 30% improvement
Maximum Skew	≤15 ns	300% improvement
PSUM ELFEXT	27dB @ 100 MHz	24dB @ 100Mhz or 100% improvement
Capacitance Unbalance	58.5 pF max @ 23°C	500% improvement

Electrical Performance of Ultra II vs ANSI/TIA/EIA 568A Cat 5e Specifications

Frequency MHz	Attenuation max dB/100m	Near End Crosstalk (NEXT) min/ave dB	Attenuation to Crosstalk (ACR)		PowerSum NEXT min/ave dB	PowerSum ACR min/ave dB	ELFEXT min dB	PowerSum ELFEXT dB	RL dB
			Ultra II min/ave dB	vs. TIA/EIA Cat 5e min dB					
1	2.0	69.3/79	67.3/77	vs. 63	67.3/75	65.3/73	67.8	65.8	23.0
4	3.9	60.3/72	56.2/68	vs. 52	58.3/67	54.2/63	55.8	53.7	23.3
8	5.6	55.8/68	50.0/63	vs. 46	53.8/63	48.1/58	49.7	47.7	25.0
10	6.2	54.3/67	47.8/61	vs. 44	52.3/62	45.9/56	47.8	45.8	25.5
16	7.9	51.2/64	43.0/57	vs. 39	49.3/60	41.1/53	43.7	41.7	25.5
20	8.9	49.8/63	40.6/55	vs. 37	47.8/58	38.6/50	41.8	39.7	25.5
25	10.0	48.3/61	38.0/52	vs. 34	46.3/57	36.1/48	39.8	37.8	24.9
31.25	11.3	46.9/60	35.4/50	vs. 31	44.9/56	33.4/46	37.9	35.9	24.4
62.5	16.3	42.4/56	25.9/41	vs. 21	40.4/52	23.9/37	31.9	29.8	23.0
100	21.0	39.3/53	18.3/33	vs. 13	37.3/48	16.3/28	27.8	25.8	23.0
155	26.8	36.4/51	10.1/26	vs. NS	34.5/45	8.1/20	24.0	21.9	20.4
200	30.9	34.8/48	4.6/19	vs. NS	32.8/44	2.6/15	21.8	19.7	19.8
250	35.0	33.3/48	-0.6/19	vs. NS	31.3/44	-2.6/15	19.8	17.8	19.2
300	38.9	32.1/46	-5.3/10	vs. NS	30.2/41	-7.3/5	18.3	16.2	17.8
350	42.6	31.1/43	-9.5/4	vs. NS	29.2/39	-11.5/0	16.9	14.9	17.3

All values are dB/100 meters unless otherwise noted • NS- Not Specified at this frequency
Specifications subject to change without notice

Ultra II

for ANSI/TIA/EIA 568A Category 5e+ extended frequency LANs




Twisted Pair

Applications: Gigabit Ethernet, 155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet
Exceeds/meets: ANSI/TIA/EIA 568A Category 5e, CENELEC EN50173, ICEA S-90-661, NEMA Low-loss Extended Frequency, AS/NZS 3085.1 and ISO/IEC 11801

Features: PSUM crosstalk compliant
 Flexible jacket with ripcord strips cleanly and resists kinking
 Coextruded colorstripe pairs for easy identification
Test report: Attached to each package at no additional cost


Plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5504M  ETL CMP/C(ETL) CMP	4	24 AWG Solid BC	FEP .007/.19 and FSPE .008/.20	CommFlex .016/.40	.195/4.8 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	25/82

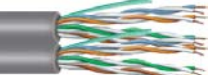
Non-plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
55N4R  ETL CMR/C(ETL) CMG	4	24 AWG Solid BC	PE .008/.20	FR PVC (Flame-Retardant PolyVinyl Chloride) .022/0.6	.210/4.9 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	24/78

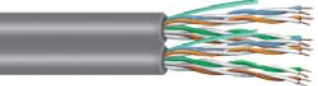
Outdoor

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5NF4 	4	24 AWG Solid BC	PE .010/.25	PE with Floodant .030/0.76	.232/5.9 Black	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	62%	40/131


Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5524M Two Cat5e+  ETL CMP/C(ETL) CMP	Two 4 pr.	24 AWG Solid BC	FEP .007/.18 and FSPE .008/.20	CommFlex .017/0.43	.390/9.9 .190/4.8 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	45/148

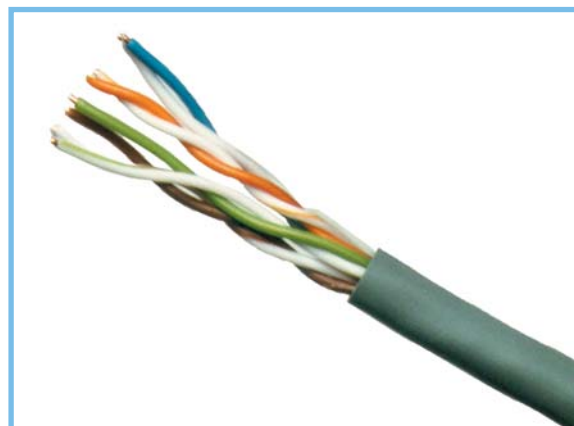
Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5524 Two Cat5e+  ETL CMP/C(ETL) CMP	4 pr.	24 AWG Solid BC	FEP .007/.18	CommFlex .017/0.43	.380/7.6 .185/4.7 White, blue and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	70%	45/148

Non-Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5N54 Two Cat5e+  ETL CMR/C(ETL) CMG	Two 4 pr.	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .020/0.51	.430/10.9 .200/5.1 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	70%	30/98

Taking Category 5e a step further, DataPipe is a 200 MHz cable developed for simultaneous bi-directional transmission over 4-pairs. Improvements to Category 5e were made and additional electrical requirements such as ISO/IEC 11801 input impedance were added. Typical applications include those of Category 5 and full duplex encoding schemes such as gigabit Ethernet. CommScope's Category 5e DataPipe cable now features an improved Commflex jacket to improve friction during installation resulting in less strain on the twisted pairs.



Electrical Performance of DataPipe

Frequency MHz	Attenuation max dB/100m		Pair to Pair								PowerSum					
			NEXT dB min		ELFEXT dB/100m min		Return Loss dB min		ACR dB min		NEXT min dB		ELFEXT min dB/100m		ACR min dB	
	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4	DataPipe	5EJ4
1.0	2.0	2.4	65.3	65.5	63.8	63.8	23.0	23.0	63.3	62.9	62.3	62.3	60.8	60.8	60.3	60.3
4.0	4.1	4.9	56.3	56.3	51.7	51.7	23.0	23.0	52.2	51.4	53.3	53.3	48.7	48.7	49.2	49.2
8.0	5.8	6.9	51.8	51.8	45.7	45.7	24.5	24.5	46.0	44.8	48.8	48.8	42.7	42.7	43.0	43.0
10.0	6.5	7.8	50.3	50.3	43.8	43.8	25.0	25.0	43.8	42.6	47.3	47.3	40.8	40.8	40.8	40.8
16.0	8.2	9.9	47.3	47.3	39.7	39.7	25.0	25.0	39.0	37.4	44.3	44.3	36.7	36.7	36.0	36.0
20.0	9.3	11.1	45.8	45.8	37.7	37.7	25.0	25.0	36.5	34.7	42.8	42.8	34.7	34.7	33.5	33.5
25.0	10.4	12.5	44.3	44.3	35.8	35.8	24.3	24.3	33.9	31.8	41.3	41.3	32.8	32.8	30.9	30.9
31.25	11.7	14.1	42.9	42.9	33.9	33.9	23.6	23.6	31.2	28.8	39.9	39.9	30.9	30.9	28.2	28.2
62.5	17.0	20.4	38.4	38.4	27.8	27.8	23.0	23.0	21.4	18.0	35.4	35.4	24.8	24.8	18.4	18.4
100.0	22.0	26.4	35.3	35.3	23.8	23.8	23.0	23.0	13.3	8.9	32.3	32.3	20.8	20.8	10.3	10.3
155.0	28.1		32.5		19.9		18.8		4.4		29.5		16.9		1.4	
200.0	32.4		30.8		17.7		18.0		-1.6		27.8		14.7		-4.6	


(All tests include swept frequency measurements)

NEXT and Power Sum values are derived from functions and truncated to the nearest whole dB.

Applications: Gigabit Ethernet, 155Mb/s ATM, 100Mb/s TP-PMD/CDDI and Fast Ethernet
Exceeds/meets: ANSI/EIA 568A Category 5e, ISO/IEC 11801
Features: PSUM crosstalk compliant
 Flexible jacket with ripcord strips cleanly and resists kinking
 Coextruded colorstrip pairs for easy identification
 Performance specified to 200 MHz

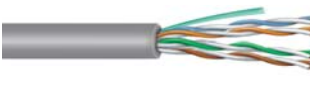
Plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5E55	4	24 AWG Solid BC	Foamed FEP .007/.18 PE .008/.20	CommFlex .017/.43	.185/4.70 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	74%	21/68



ETL CMP/C(ETL) CMP

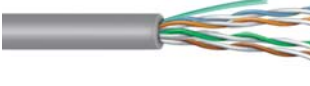
Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5E40	4	24AWG Solid BC	FEP .007/.18	CommFlex .017/	.180/4.6 White, blue and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	74%	21/68



ETL CMP/C(ETL) CMP

Non-plenum

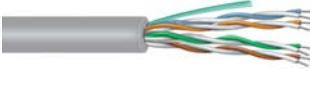
Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5EN5	4	24 AWG Solid BC	PE .008/.20	PVC .022/.56	.200/.51 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	21/68



ETL CMR/C(ETL) CMG

Patch Swept to 100 MHz

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5EJ4	4	24 AWG Stranded TC	PE .008/.20	Flame-retardant PVC .020/.51	.218/5.5 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	72%	20/66



ETL CM/C(ETL) CMG

Outdoor

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5EF4	4	24AWG Solid BC	PE .008/.20	PE with Floodant .030/.76	2.40/6.1 Black	14	100Ω ±15%	28.6Ω/kft 9.4Ω/100m	62%	37/121



Non-Plenum, Screened Twisted Pair (ScTP) Swept to 100 MHz

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5ENS4	4	24AWG Solid	PE .010/.25	PVC .020/.51	.238/6.0 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	27/89



ETL CMR/C(ETL) CMG

Plenum, Screened Twisted Pair (ScTP) Swept to 100 MHz

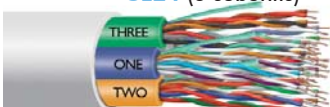
Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5ES4	4	24AWG Solid	FEP .010/.25	PVC .015/.40	.200/5.1 White, blue, yellow, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	27/89



ETL CMR/C(ETL) CMG

Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5E24 (6 subunits)	24	24 AWG Solid BC	FEP .007/.18	PVDF .018/.46	.586/14.9 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	141/462



ETL CMP/C(ETL) CMP

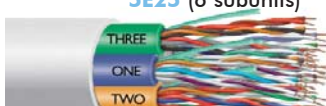
Non-Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5EN24 (6 subunits)	24	24 AWG Solid BC	PE .008/.20	PVC .022/.56	.590/15 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	124/407




ETL CMR/C(ETL) CMG

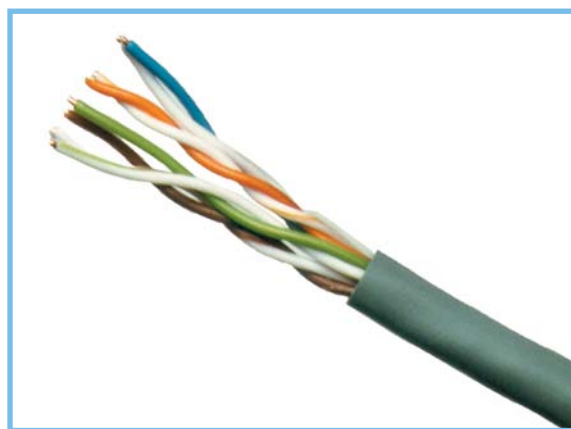
Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5E25 (6 subunits)  ETL CMP/C(ETL) CMP	25	24 AWG Solid BC	FEP .035/.89	PVDF .018/.46 inner CommFlex 0.19/.48	.590/15 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	162/531

Non-Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5EN25 (6 subunits)  ETL CMR/C(ETL) CMG	25	24 AWG Solid BC	PE .036/.91	FR-PVC .033/.84 inner FR-PVC .022/.56	.635/16 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	148/485

Established by the telecommunications industry association and first published in ANSI/EIA/TIA-568 in 1991, the Category 5 designation applies to 100 Ohm unshielded twisted pair cables and associated connecting hardware whose transmission characteristics are specified up to 100 MHz. Typical applications range from voice to 155 Mb/s, Fast Ethernet, ATM TPDDI, CDDI and TP-PMD.



Applications:

- 155 Mb/s ATM
- 100Mb/s TP-PMD/CDDI
- 100Mb/s Fast Ethernet
- 16 Mb/s token ring
- 10 Mb/s Ethernet

Electrical Performance of CommScope Standard Category 5

Frequency MHz	Attenuation max dB/100m	Near End Crosstalk (NEXT) min dB/100m	Attenuation to Crosstalk (ACR) min dB/100m	ELFEXT dB/100m	SRL dB/100m
.772	1.8	64	62	63	23.0
1	2.0	62	60	61	23.0
4	4.1	53	49	49	23.0
8	5.8	49	43	43	23.0
10	6.5	47	41	41	23.0
16	8.2	44	36	37	23.0
20	9.3	43	34	35	23.0
25	10.4	41	31	33	22.0
31.25	11.7	40	28	31	21.1
62.5	17.0	35	18	25	18.1
100	22.0	32	10	21	16.0

Category 5


for ANSI/TIA/EIA 568A Category 5 LANs




Twisted Pair


- Applications:** 155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI, 100 Mb/s Fast Ethernet, 16 Mb/s token ring and 10 Mb/s Ethernet
- Meets:** ANSI/TIA/EIA 568A Category 5, ISO/IEC 11801, CENELEC EN50173, ICEA S-90-661 and AS/NZS 3085.1
- Features:** Flexible jacket with ripcord strips cleanly and resists kinking
Coextruded colorstripe pairs for easy identification

Plenum


Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
0590  ETL CMP/C(ETL) CMP	4	24 AWG Solid BC	Foamed FEP .007/.18 PE .008/.20	CommFlex .017/.43	.185/4.7 White, blue and yellow	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	74%	21/68

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5040  ETL CMP/C(ETL) CMP	4	24 AWG Solid BC	Foamed FEP .007/.18	CommFlex .017/.43	.180/4.6 White, blue and yellow	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	74%	21/68

Non-plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
0478R  ETL CMR/C(ETL) CMG	4	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .022/0.6	.200/5.1 White, blue and yellow	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	21/68

Outdoor

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
0578 	4	24 AWG Solid BC	PE .008/.20	PE with Floodant .030/.76	.240/6.1 Black	5.6 100m Nom. 330 100m Max. to 1 KHz	100Ω ± 15%	9.38Ω/kft	62%	37/121

Category 5

for ANSI/TIA/EIA 568A Category 5 LANs



Twisted Pair

Plenum Screened Twisted Pair (ScTP)

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
0577	4	24 AWG Solid BC 7x32 AWG TC Drain AL Tape Shield	FEP .010/.25	CommFlex .017/0.43	.235/6.0 White, blue, yellow,	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	30/98

UL CMP/C(UL) CMP

Non-Plenum Screened Twisted Pair (ScTP)

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
0575	4	24 AWG Solid BC 7x32 AWG TC Drain AL Tape Shield	PE .010/.25	Flame-retardant PVC .020/0.50	.238/ White, blue, yellow,	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	30/98

UL CMR/C(UL) CMG

Plenum Multipair

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5612 (3 subunits)	12	24 AWG Solid BC	FEP .007/.18	PVDF .018/.46	.396/10 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	77/252

ETL CMP/C(ETL) CMP

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5616 (4 subunits)	16	24 AWG Solid BC	FEP .007/.18	PVDF .018/.46	.474/12 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	71%	98/321

ETL CMP/C(ETL) CMP


Category 5 MultiPair


for ANSI/TIA/EIA 568A Category 5 LANs




Twisted Pair

Non-Plenum Multipair


Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5N12 (3 subunits)  ETL CMR/C(ETL) CMG	12	24AWG Solid BC	PE .008/.20	PVDF .018/.46	.386/9.8 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	89/292

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5N16 (4 subunits)  ETL CMR/C(ETL) CMG	16	24 AWG Solid BC	PE .008/.20	PVDF .018/.46	.486/12 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	113/369

Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Subunit Jacket Material & OD in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Cap. pF/ft	Char. Imp.	Maximum DCR	Vel. of Prop.	Shipping Wt. in lbs. kft / km
5624 (6 subunits)  ETL CMP/C(UL) CMP	24	24 AWG Solid BC	FEP .006/.15	CommFlex .170/4.3	PVDF .018/.46	.546/13.9 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	72%	167/548

Non-Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Subunit Jacket Material & OD in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Cap. pF/ft	Char. Imp.	Maximum DCR	Vel. of Prop.	Shipping Wt. in lbs. kft / km
5N24 (6 subunits)  UL CMR/C(UL) CMG	24	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .180/4.6	Flame-retardant PVC .017/.43	.560/14.2 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	70%	144/472

Category 5 MultiPair


for ANSI/TIA/EIA 568A Category 5 LANs



Twisted Pair

Plenum Hybrid


Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Subunit Jacket Material & OD in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Cap. pF/ft	Char. Imp.	Maximum DCR	Vel. of Prop.	Shipping Wt. in lbs. kft / km
5625 (6 subunits)	25	24 AWG Solid BC	FEP .007/.18	CommFlex .170/4.3	PVDF .018/0.46	.546/13.9 White	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	72%	162/531



ETL CMP/C(UL) CMP

Non-Plenum Hybrid


Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Subunit Jacket Material & OD in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Cap. pF/ft	Char. Imp.	Maximum DCR	Vel. of Prop.	Shipping Wt. in lbs. kft / km
5N25 (6 subunits)	25	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .180/4.57	Flame-retardant PVC .017/0.43	.570/Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	70%	148/485



UL CMR/C(UL) CMG

Non-Plenum Hybrid

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Subunit Jacket Material & OD in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Cap. pF/ft	Char. Imp.	Maximum DCR	Vel. of Prop.	Shipping Wt. in lbs. kft / km
5N25A (1 subunit)	25	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .195/4.9	Flame-retardant PVC .038/0.97	.510/12.9 Gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	70%	98/321



UL CMR/C(UL) CMG

Category 3

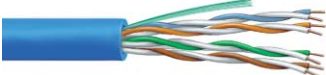
for ANSI/TIA/EIA 568A Category 3 LANs




Twisted Pair

Applications:	10 Mb/s Ethernet, 4/16 Mb/s Token Ring, ISDN Voice Networks
Meets:	ANSI/TIA/EIA 568A Category 3, NEMA 24 AWG Premise Wire, IEEE 802.3 10BaseT Ethernet, IEEE 802.5 UTP Token Ring 4/16, ISDN Voice Grade, IBM Type 3 Media
Features:	Flexible jacket with ripcord strips cleanly and resists kinking Coextruded colorstripe pairs for easy identification


Plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
3504  ETL CMP/C(UL) CMP	4	24 AWG Solid BC	Plenum PVC .008/.20	CommFlex .014/.36	.186/4.72 White, blue, yellow, green, purple, pink and gray	20	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	62%	21/69


Non-plenum

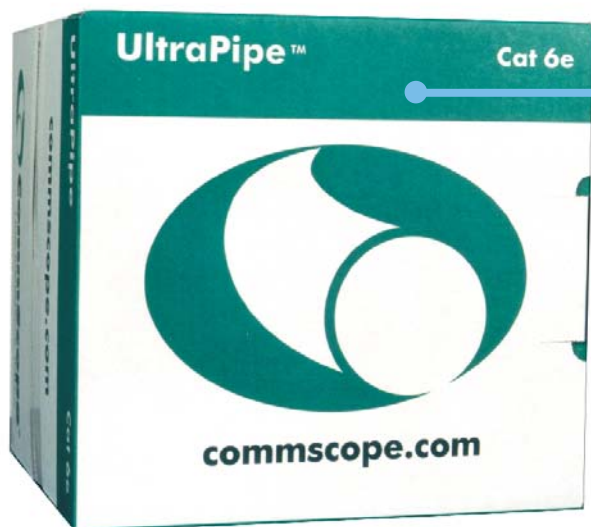
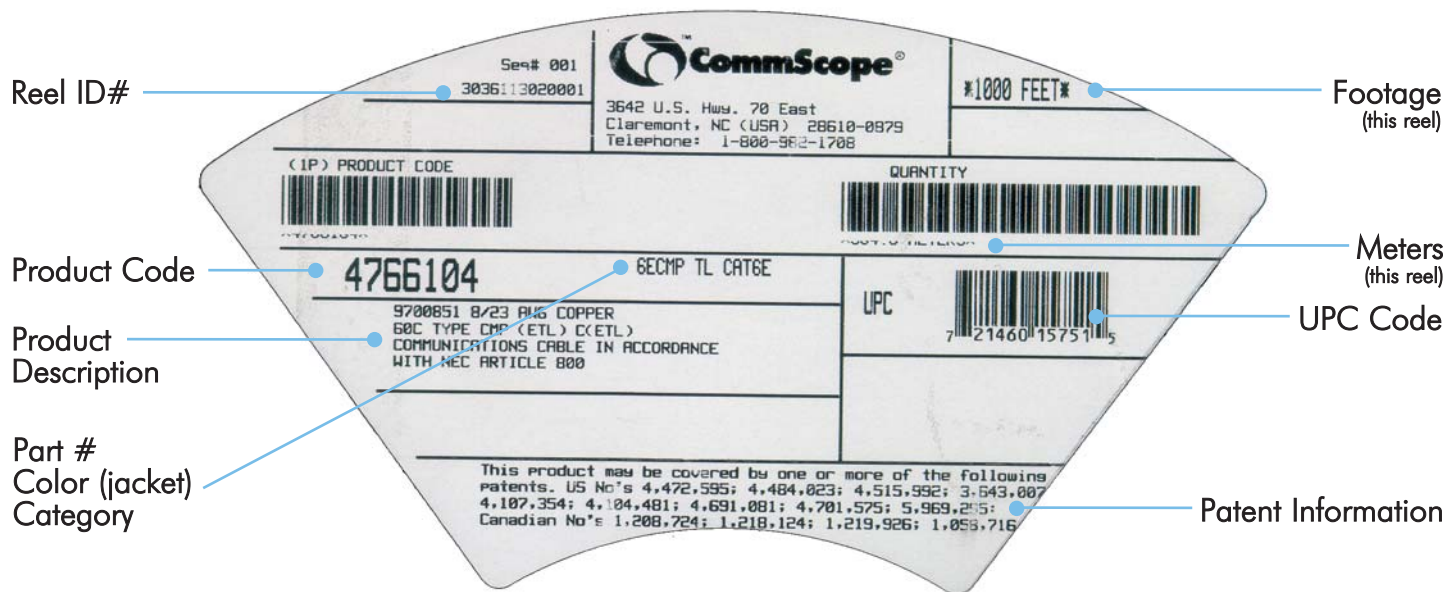
Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
35N4  ETL CMR/C(ETL) CMG	4	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .018/.46	.175/4.45 White, blue, yellow, green, purple, pink and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100m	68%	19/62

Plenum Multipair

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
3506  ETL CMP/C(UL) CMP	6	24 AWG Solid BC	Plenum PVC .008/.20	CommFlex .014/.36	.205/5.21 White and gray	20	100Ω ± 15%	28.6Ω/kft 9.4Ω/100	62%	32/105

Non-Plenum Multipair

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
35N6  ETL CMR/C(ETL) CMG	6	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .020/.51	.205/5.21 White and gray	14	100Ω ± 15%	28.6Ω/kft 9.4Ω/100	68%	27/88



**Featuring New
Color Identification
System**



CommScope LAN Packaging Matrix

Category	Product Family	Catalog Number	Plenum/ Non Plenum	Rating	Wooden Reels Box/Pallet	Plastic Reels		CommPak		Reel-In-Box	
						Box/Pallet	Pallet Size 48x40x4	Box/Pallet 275lb. rated Corrugated Pallet Size 48x42x4	Package Color	Box/Pallet 275lb. rated Corrugated Pallet Size 48x42x4	Package Color
Category 6e	UltraPipe UltraPipe UltraMedia Patch	6ECMP	Plenum	CMP		12x5x10	White			12.5x11.5x11.5	White
		6ECMR	Non-Plenum	CMR		12x5x10	White			12.5x11.5x11.5	Brown
		6EJCM	Non-Plenum	CM		12x5x8	White				
Category 6	UltraMedia UltraMedia UltraMedia	7504	Plenum	CMP		12x5x10	White			12.5x11.5x11.5	White
		75N4	Non-Plenum	CMR		12x5x10	White			12.5x11.5x11.5	Brown
		6NF4	N/A Outdoor	Outdoor		12x5x10	White				
Category 5e+	Ultra II Ultra II Ultra II Ultra II Ultra II Ultra II	5504M	Plenum	CMP		12x5x8	White			12.5x11.5x11.5	White
		5504	Plenum	CMP		12x5x8	White			12.5x11.5x11.5	White
		5524M	Plenum	CMP	14.5x6x13						
		55N4R	Non-Plenum	CMR		12x5x8	White			12.5x11.5x11.5	Brown
		5N54	Non-Plenum	CMR	14.5x6x13						
		5NF4	N/A Outdoor	Outdoor		12x5x10	White				
Category 5e	DataPipe DataPipe DataPipe DataPipe Patch DataPipe DataPipe DataPipe DataPipe DataPipe DataPipe	5E55	Plenum	CMP		12x5x8	White			12.5x11.5x11.5	White
		5E40	Plenum	CMP		12x5x8	White	14x10x14	White	12.5x11.5x11.5	White
		5EN5	Non-Plenum	CMR		12x5x8	White	14x10x14	Brown	12.5x11.5x11.5	Brown
		5E14	Non-Plenum	CM		12x5x8	White				
		5E24	Plenum	CMP	30x12x12						
		5EN24	Non-Plenum	CMR	30x12x12						
		5E25	Plenum	CMP	30x12x12						
		5EN25	Non-Plenum	CMR	30x12x12						
		5EF4	N/A Outdoor			12x5x10	White				
Category 5	Category 5 Category 5 Category 5 Category 5 Category 5 Category 5 Category 5 Category 5 Category 5 Category 5	0590	Plenum	CMP		12x5x8	White				
		5040	Plenum	CMP		12x5x8	White	14x10x14	White	12.5x11.5x11.5	White
		0478R	Non-Plenum	CMR		12x5x8	White	14x10x14	Brown		
		0578	N/A Outdoor	Outdoor		12x5x10	White				
		0577	Plenum	CMP	14.5x6x13						
		0575	Non-Plenum	CMR		12x5x8	White				
		5624	Plenum	CMP	30x12x12						
		5N24	Non-Plenum	CMR	30x12x12						
		5625	Plenum	CMP	30x12x12						
		5N25	Non-Plenum	CMR	30x12x12						
Category 3	Category 3 Category 3 Category 3	5N25A	Non-Plenum	CMR	30x12x12						
		3504	Plenum	CMP		10.5x3.5x9.5	White	14x10x14	White		
		35N4	Non-Plenum	CM		10.5x3.5x9	White	14x10x14	Brown		
		3506	Plenum	CMP	14.5x6x13						

Certification of Quality and Performance

Proof of performance comes with every reel of UltraPipe, UltraMedia & Ultra II



Certified Test Reports

Quality is just a word until it is proven. This is why CommScope backs its claims for the performance of its enhanced 568A products by testing each master reel of UltraPipe, UltraMedia and Ultra II.

These cables undergo frequency sweep tests for crosstalk, attenuation and structural return loss. Test values are recorded and printed out on individual sheets next to the 568A specification and are then attached to reel for your examination. Test results for power sum NEXT and characteristic impedance are printed out as well.

This report is your assurance that the cable you've paid for will perform as promised.

ISO9001

ISO manufacturing certification is another proof of CommScope's commitment to manufacturing excellence in all aspects of its



operations. Our policy is to design, manufacture and deliver products and services which conform to specifications and satisfy your requirements and expectations in every way.

***** PASSED *****

** MASTER REEL# 703151108, Based on 1000 FT

** DATE: Thu Mar 15 14:36:50 2001,

** LOT #: 252910,

11801 Ultra, #131 TEST FIXTURE

INSPECTOR - 030601SB1,

PRODUCT CODE: 4640494,

-----COMMENTS-----

CHARACTERISTIC IMPEDANCE

BL/WT	OR/WT	GN/WT	BR/WT
101.4	101.0	103.4	100.4

NEXT POWER SUM

BL/WT	OR/WT	GN/WT	BR/WT
PASS	PASS	PASS	PASS

SRL

FREQ (MHZ)	BL/WT	OR/WT	GN/WT	BR/WT	568 SPEC.
.772	N/A	N/A	N/A	N/A	N/A
1	26	26	27	26	23
4	53	50	50	83	23
8	44	54	39	47	24.5
10	43	47	42	40	25
16	42	47	40	46	25
20	41	95	37	50	25
25	43	50	37	49	25
31.25	40	45	35	52	24.3
62.5	44	51	32	87	23
100	56	54	66	60	23
155	30	39	30	48	20
200	38	45	28	43	20
350	51	26	23	35	N/A

ATTENUATION (dB/1000')

BL/WT	OR/WT	GN/WT	BR/WT	568 SPEC.
4.9	5.1	4.9	5.0	5.5
5.4	5.5	5.3	5.4	6.3
11.3	11.6	11.2	11.5	13.0
16.2	16.7	16.1	16.5	18.0
18.4	18.9	18.2	18.7	20.0
23.2	23.8	23.0	23.6	25.0
26.2	26.8	25.9	26.5	28.0
29.4	30.1	29.1	29.8	32.0
33.0	33.7	32.6	33.4	36.0
47.3	48.4	46.9	47.9	52.0
60.8	62.1	60.4	61.5	67.0
77.0	78.3	76.6	77.7	N/A
88.2	89.5	87.8	88.9	N/A
119.8	121.1	119.4	120.5	N/A

CROSSTALK (dB)

FREQ (MHZ)	BL/OR	BL/GN	BL/BR	OR/GN	OR/BR	GN/BR	568 SPEC.
.772	83	79	76	87	85	84	71
1	73	74	73	74	75	76	69
4	70	77	69	72	91	71	60
8	68	76	67	71	69	65	56
10	81	70	60	67	72	71	54
16	61	73	62	62	64	60	51
20	63	66	55	57	65	55	50
25	61	60	56	61	65	53	48
31.25	70	66	61	62	66	63	47
62.5	59	62	65	50	61	48	42
100	56	54	46	53	62	45	39
155	47	60	46	50	49	45	36
200	39	48	45	47	49	48	35
350	42	52	47	42	56	53	31

Note: All tests include swept frequency measurements.

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In the past thirty years, fiber optic cables have evolved from a laboratory novelty to become an indispensable necessity on the communication superhighway. A fiber optic cable's superior bandwidth and versatility makes it the transmission medium of choice for a variety of communication applications.

Bearing this versatility in mind, CommScope has developed three families of fiber optic cables to be used anywhere in the communication hierarchy.

Outside plant cables for standard and rugged environments

For direct buried, underground duct and aerial installations, CommScope offers several designs, which include a variety of loose tube cables, from all dielectric and armored to heavy duty moisture-resistant, double armored and triple-jacketed cables. Design options include: Fiber Feeder®, a smaller, lighter weight, Central Tube cable for use when space is at a minimum; Central Tube for point-to-point installations; and Stranded Loose Tube cables. Any of these cables can be pre-installed in high-strength conduit.

Indoor/outdoor cables for strength and safety (including zero-halogen types)

CommScope's design for these hybrid application cables offer construction and jacketing suitable for outside usage yet comply with NEC/CEC riser (OFNR) flame standards. This design allows you to run cable through the building entrance without having to terminate and splice different cables together which results in significant savings in time and labor. Cable types include dielectric fiber feeder and central tube designs, standard and heavy-duty stranded loose tube cables and specially designed low-smoke/zero halogen distribution and cordage cables.

Premises cables for safety and performance

CommScope's premises cables are designed to handle the unique stresses of indoor applications. Along with riser and plenum-rated distribution, breakout and cordage cables, CommScope also offers heavy-duty distribution and cordage that provide additional fiber protection.

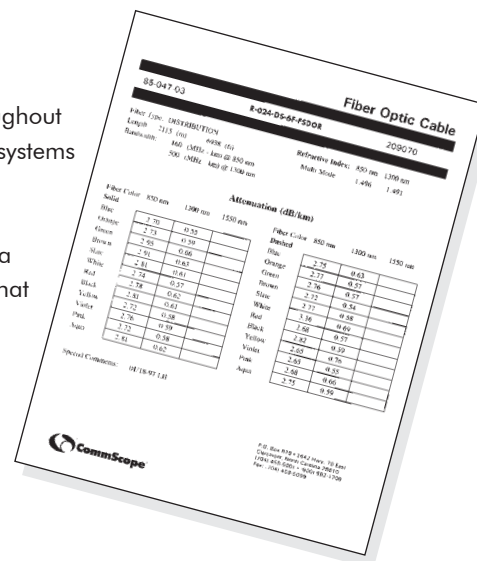
Test reports - a higher standard for higher speeds

Every reel of CommScope fiber optic cable is subjected to stringent testing throughout the entire manufacturing process. Our state-of-the-art process controls and testing systems insure that every foot of CommScope cable consistently meets or exceeds our high standards.

To prove that our fiber optic cables exceed industry standards, we go to the extra step of attaching the individual cable test report to the reel. You get proof-positive that the cable you purchase will perform to the level you require.

Remember, a network is only as good as the cable that connects it. Specify the cables that make networks work; fiber optic cables from CommScope.

Detailed product specification sheets are available at the download area of our website.



The image shows a sample of a Fiber Optic Cable test report sheet. It includes fields for Fiber Color, Length, and Bandwidth. It also features a table for Attenuation (dB/km) for various fiber colors (Blue, Green, Yellow, Red, Black, White, Purple, Grey) at different lengths (500m, 1000m, 1500m). The report is dated 08/18/07 and includes the CommScope logo.

Fiber Color	500m	1000m	1500m
Blue	2.70	0.53	
Green	2.73	0.53	
Yellow	2.70	0.53	
Red	2.70	0.53	
Black	2.70	0.53	
White	2.70	0.53	
Purple	2.70	0.53	
Grey	2.70	0.53	

Fiber Optic Numbering Key

CommScope
Catalog No.
Position



Steps to build the catalog number for the cable you need!

Let the installation environment determine your cable style.

Position 1 (Cable Style)

- OOutdoor (Arid Core Standard)
- UUrethane
- MMessenger
- HHarsh Environment
- Z.....Zero Halogen
- P.....Plenum
- R.....Riser
- F.....Flooded Stranded Loose Tube

How many fibers do you need?*

Positions 2, 3, & 4 (Total Fiber Count)

Total Fiber Count (in increments of two)

*XXX variable in catalog number.

What cable construction do you want?

Positions 5 & 6 (Construction)

- LAStranded Loose Tube Armored
- LNStranded Loose Tube Non Armored All Dielectric
- LHStranded Loose Tube Heavy Duty All Dielectric
- L2Stranded Loose Tube Dual Jacket/Single Armor
- L3Stranded Loose Tube Triple Jacket/Dual Armor
- FAFiber Feeder® Armored
- FNFiber Feeder® Non Armored All Dielectric
- FSFiber Feeder (Self Supporting)
- CA.....Central Tube Armored
- CNCentral Tube Non Armored All Dielectric
- DS.....Distribution
- BOBreakout
- DUDuplex
- ICInterconnect
- ZC.....Zipcord
- SPSimplex

What type of fiber does the application require?*

Positions 7 & 8 (Fiber Type)

- 8A8.3/125µm Singlemode, 9.3 MFD
- 8H8.3/125µm Singlemode, 9.0 MFD
- 6U62.5/125µm UltraFiber™ Multimode
- 6F.....62.5/125µm Enhanced FDDI Grade Multimode
- 5H50/125µm Multimode
- CMComposite (Singlemode and Multimode)

*XY variable in catalog number

Do you want jacket print in feet or meters?

Position 9 (Unit of Length printed on Jacket)

- FPrinted in Feet (standard)
- MPrinted in Meters

Positions 10 & 11

For cordage, value indicates outside diameter; otherwise additional description

- 01-12.....Fiber Count per Subunit
- HDHeavy Duty
- SDStandard

Cordage

- 181.8 mm Jacket OD
- 202.0 mm Jacket OD
- 252.5 mm Jacket OD
- 292.9 mm Jacket OD

Do you need a co-extruded stripe for tracer?*

Positions 12 & 13 (Color Field)

- **Outdoor Cables** (stripe or tracer)
Outdoor Cables are manufactured with a standard all-black jacket — No Stripe (NS). Stripes (tracers) are also available in the following colors:
Blue (BL), Green (GR), Orange (OR), Violet (VL), White (WH) and Yellow (YL).
- **Premises, Indoor/Outdoor or Outdoor Tight Buffer Cables** (jacket color)
Manufactured with the following standard jacket colors:
Black (BK) - for Indoor/Outdoor and Tight Buffer Outdoor
Orange (OR) - for Multimode & Composite
Yellow (YL) - for Singlemode

Available Non Standard Jacket Colors

(min. order required for non-standard colors):

- | | |
|---------------|---------------|
| AQAqua | RDRed |
| BKBlack | RSRose |
| BLBlue | SL.....Slate |
| BRBrown | VL.....Violet |
| GR.....Green | WHWhite |
| OR.....Orange | YL.....Yellow |

*ZZ variable in catalog number.

Note...

When positions 7 & 8 are CM (composite cables), positions 14-23 are required.

- Position 14 - 15Fiber type 8H or 8A
- Position 16 - 18Fiber Count (aaa variable in catalog number)
- Position 19 - 20Multimode Fiber Type
- Position 21 - 23Fiber Count (bbb variable in catalog number)

Singlemode Fiber Specifications

A variety of fiber types for your applications



Available in all CommScope cable types
8H (9.0 MFD Singlemode) and 8A (9.3 MFD Singlemode)

	8H	8A
Attenuation Coefficient		
Maximum Attenuation - Outside Plant Loose and Central Tube Designs	0.35 dB/km @ 1310 nm	0.35 dB/km @ 1310 nm
	0.25 dB/km @ 1550 nm	0.25 dB/km @ 1550 nm
Maximum Attenuation - Indoor/Outdoor Loose and Central Tube Designs	0.5 dB/km @ 1310 nm	0.5 dB/km @ 1310 nm
	0.5 dB/km @ 1550 nm	0.5 dB/km @ 1550 nm
Maximum Attenuation - Tight Buffered Cables	0.7 dB/km @ 1310 nm	0.7 dB/km @ 1310 nm
	0.7 dB/km @ 1550 nm	0.7 dB/km @ 1550 nm
Mode Field Diameter	9.0 μ m	9.3 μ m
Mode Field Diameter Tolerance	$\pm 0.3\mu$ m	$\pm 0.5\mu$ m
Cladding Diameter	125 \pm 1.0 μ m	125 \pm 1.0 μ m
Coating Diameter	245 \pm 10 μ m	245 \pm 10 μ m
Index of Refraction	1.470 @ 1310nm	1.470 @ 1550nm
Proof test	> 100 kpsi	> 100 kpsi
Optical Characteristics		
Attenuation 1310 nm	.35 dB/km max.	.35 dB/km max.
Attenuation 1380 nm	2.0 dB/km max.	2.0 dB/km max.
Attenuation 1550 nm	0.25 dB/km max.	0.25 dB/km max.
Attenuation 1285-1310 nm	0.40 dB/km max.	0.40 dB/km max.
Attenuation 1310-1330 nm	0.40 dB/km max.	0.40 dB/km max.
Attenuation 1525-1575 nm	0.30 dB/km max.	0.30 dB/km max.
Cutoff Wavelength (Uncabled)	1150-1330 nm	1190-1330 nm
OTDR Point Defects	0.07dB max.	0.04 dB max.
Zero Dispersion Wavelength	1310 \pm 10 nm	1300-1326 nm
Zero Dispersion Slope	0.092 ps/km.nm ² max.	0.092 ps/km.nm ² max.
Dispersion 1285-1330nm	3.2 ps/km.nm max.	3.5 ps/km.nm max.
Dispersion @ 1550nm	18 ps/km.nm max.	18 ps/km.nm max.
Geometric Characteristics		
Core Ovality	6% max.	6% max.
Clad/Core offset	0.6 μ m max.	0.8 μ m max.
Cladding Diameter	125 \pm 1 μ m	125 \pm 1 μ m
Fiber Ovality	1% max.	1.5% max.
Coating Diameter	245 \pm 10 μ m	245 \pm 10 μ m
Environmental Characteristics		
Temperature Sensitivity (-60°C to +85°C)		
1310nm and 1550nm	0.05dB increase max.	0.05dB increase max.
Heat Aging, 85°C	0.05dB increase max.	0.05dB increase max.
Water Immersion, 1310 nm & 1550nm, 30 day	0.05 dB increase max.	0.05dB increase max.
Mechanical Characteristics		
Macro bend 100 wraps, 60mm mandrel		
@1310nm	0.05dB max.	
@1550nm	0.1dB max.	0.5, 100t x 75
Macro bend 1 wrap, 32mm mandrel		
@1550nm	0.1dB max.	0.5dB max.
Proof test	100kpsi	100kpsi

Specifications subject to change.

UltraFiber™ Multimode Optical Fiber

High bandwidth fiber for LAN, WAN and video cabling applications



CommScope's premium multimode fiber with twice the bandwidth of regular fiber

Guaranteed to carry Gigabit Ethernet 1200m @ 1300nm and 500m @ 850nm for twenty years*

Minimum bandwidth of 1000 MHz•km @ 1300 nm allows for migration to faster protocols

220 MHz•km @ 850 nm means excellent performance on existing networks

Available in all CommScope cable designs (outdoor loose tube, riser-rated loose tube and tight buffer)

6U 62.5/125μm UltraFiber Multimode Performance ** LASER CERTIFIED

Optical Characteristics

Attenuation/loose and central tube designs	2.9 dB/km @ 850 nm	0.9 dB/km @ 1300 nm
Attenuation/tight buffered cables	3.5 dB/km @ 850 nm	1.5 dB/km @ 1300 nm
Minimum Modal Bandwidth	220 MHz•km @ 850 nm	1000 MHz•km @ 1300 nm
Gigabit Ethernet Distances*	500 m @ 850 nm	1200 m @ 1300 nm
Numerical Aperture	0.275 ± 0.015	
Chromatic Dispersion	FDDI specifications	
Backscatter		
Step (mean of bidirectional measurement)	≤ 0.1 dB	
Irregularities over Length of Fiber	≤ 0.1 dB	
Reflections	Not allowed	
Group Index of Refraction (typical)	1.497 @ 850 nm	1.492 @ 1300 nm

Geometric Characteristics

Core Diameter	62.5 ± 2.5 μm
Core Non-Circularity	≤ 6.0 %
Core/Cladding Concentricity Error	≤ 1.5 μm
Cladding Diameter	125 ± 2.0 μm
Cladding Non-Circularity	≤ 1.0 %
Coating Diameter	245 ± 10 μm
Coating Non-Circularity	≤ 6 %
Coating Concentricity Error	≤ 12.5 μm

Environmental Characteristics

Temperature Dependence @ 850 nm and 1300 nm Induced Attenuation (-60° to +80°C)	≤ 0.1 dB/km
Watersoak Dependence @ 850 nm and 1300 nm Induced Attenuation (20°C for 30 days)	≤ 0.2 dB/km
Damp Heat Dependence @ 850 nm and 1300 nm Induced Attenuation (+85°C @ 85% RH for 30 days)	≤ 0.2 dB/km

Mechanical Characteristics

Proof test	≥ 8.8 Newtons ≥ 1.0 % ≥ 100 kpsi
Bend-induced Attenuation (100 turns around a 75mm dia. mandrel)	≤ 0.5 dB
Dynamic Stress Corrosion Susceptibility Parameter (typical)	≥ 27
Coating Strip Force (typical)	1.4 Newtons

* 20 year warranty applicable within system attenuation restraints.

** CommScope UltraFiber is verified for laser launch applications using conventional lasers or VCSELs



Multimode Fiber Specifications

A variety of fiber types for your applications



Different fiber types and grades help you match performance and cost:

6F (62.5/125 μ m graded index multimode/FDDI grade)

5H (50/125 μ m graded index multimode/High-performance grade)

Available in all CommScope cable types

6F Fiber - 62.5/125 μ m Enhanced FDDI Multimode

Attenuation Coefficient

Attenuation - Loose Tube and Central Tube Designs	3.0 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Attenuation - Tight Buffered Cables	3.5 dB/km @ 850 nm	1.5 dB/km @ 1300 nm
Minimum Modal Bandwidth	200 MHz•km @ 850 nm	500 MHz•km @ 1300 nm
Gigabit Ethernet Distances *	300 m @ 850 nm	700 m @ 1300 nm
Numerical Aperture	0.275 \pm 0.015	
Core Diameter	62.5 \pm 3.0 μ m (ovality of \leq 6.0 %/concentricity error of \leq 1.0 μ m)	
Cladding Diameter	125 \pm 2.0 μ m (concentricity error of \leq 1.0 μ m)	
Coating Diameter	245 \pm 10 μ m (ovality of \leq 6.0 %)	
Index of Refraction	1.497 @ 850nm	1.492 @ 1300nm
Proof test	> 100 kpsi	

5H Fiber - 50/125 μ m High-performance Multimode •SPECIAL - Minimum orders only•

Attenuation Coefficient

Attenuation - Loose Tube and Central Tube Designs	2.7 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Attenuation - Tight Buffered Cables	3.5 dB/km @ 850 nm	1.5 dB/km @ 1300 nm
Minimum Modal Bandwidth	500 MHz•km @ 850 nm	500 MHz•km @ 1300 nm
Gigabit Ethernet Distances*	600 m @ 850 nm	600 m @ 1300 nm
Numerical Aperture	0.200 \pm 0.015	
Core Diameter	50.0 \pm 3.0 μ m (ovality of \leq 6.0 %/concentricity error of \leq 1.0 μ m)	
Cladding Diameter	125 \pm 2.0 μ m (concentricity error of \leq 1.0 μ m)	
Coating Diameter	245 \pm 10 μ m (ovality of \leq 6.0 %)	
Index of Refraction	1.482 @ 850nm	1.479 @ 1300nm
Proof test	> 100 kpsi	

* 20 year warranty applicable within system attenuation restraints.

** CommScope UltraFiber is verified for laser launch applications using conventional lasers or VCSELs



Outside Plant Cables

Robust dielectric and armored constructions



CommScope has engineered one of the most complete outside plant (OSP) product lines in the cable industry in order to provide you with optimum performance for your application, no matter how rigorous it may be.

All CommScope loose tube OSP cables offer three levels of moisture protection, including a water-blocking gel filling in the buffer tubes. Excess fiber length helps maintain a strain-free environment in the cable for better mechanical and optical performance. And special harsh-condition cables have been engineered to withstand the rugged conditions imposed by fossil fuels, solvents and acids.

We offer several constructions, which include:

Stranded Loose Tube, using reverse oscillation stranding, in dielectric and armored constructions, with up to 288 fibers

Fiber Feeder®, a compact, cost-efficient design with up to 24 fibers protected by steel armor or all dielectric with a robust central tube

Central Tube, both armored and dielectric, with 2 to 96 fibers arranged in easy-to-handle color-coded 12 fiber groups

Harsh Environment Stranded Loose Tube cables of up to 72 fibers protected by multiple jacket/armor combinations, including a triple-jacketed harsh environment conditions cable

CommScope's ARID-CORE® Moisture Barrier

- No greasy gel
- Speeds installation time by as much as 30%
- Installer friendly

Moisture migration is virtually eliminated in Stranded Loose Tube cables by means of a unique three-level approach. In addition to tough outer jacketing and gel filling within the buffer tube, we employ ARID-CORE, a super-absorbent polymer (SAP) technology between the jacket and the buffer tubes. This polymer is a coating over the central tube that swells. When moisture meets the ARID-CORE, thereby virtually eliminating water migration and serving as a physical block ensuring long-term cable reliability in the Outside Plant.

Meets requirements of Telcordia, EIA/TIA, REA/RUS, and IEC industry standards. CommScope is registered to the ISO 9001 quality standard.

Calculate sag and tension values with our SpanMaster™ software available free on our website.



Outside Plant Arid-Core® Stranded Loose Tube Non-Armored All Dielectric



Designs for aerial and conduit applications

ARID-CORE water blocking technology protects fibers from moisture /significantly reduces termination effort

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode

Standard color-coding on fibers and buffer tubes for easy identification

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	Radius Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/1000' kg/1000m
Single jacket 2 - 72 Fiber	O-XXX-LN-XY-F12NS	.49/12.5	9.8/24.0	4.9/12.5	600/2700	220	2.9 N•m	77 115
74 - 96 Fiber	O-XXX-LN-XY-F12NS	.57/14.5	11.4/29.0	5.7/14.5	600/2700	220	5.9 N•m	102 152
98 - 120 Fiber	O-XXX-LN-XY-F12NS	.65/16.6	13.0/33.2	6.5/16.6	600/2700	220	8.8 N•m	121 181
122 - 144 Fiber	O-XXX-LN-XY-F12NS	.73/18.6	14.6/37.1	7.3/18.6	600/2700	220	11.8 N•m	136 203
146 - 216 Fiber	O-XXX-LN-XY-F12NS	.72/18.4	14.4/36.6	7.2/18.4	600/2700	220	11.8 N•m	146 218
218 - 288 Fiber	O-XXX-LN-XY-F12NS	.84/21.3	16.8/42.6	8.4/21.3	600/2700	220	11.8 N•m	198 295
Singlemode/Multimode Composite (4-288 fiber)	O-XXX-LN-CM-F12NS/XYaaa/XYbbb	Refer to above specifications.						

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)
8A (8.3/125μm High Performance 9.3 MFD fiber)
6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)
5H (50/125μm)

For Composites Only:

aaa is replaced with singlemode fiber count

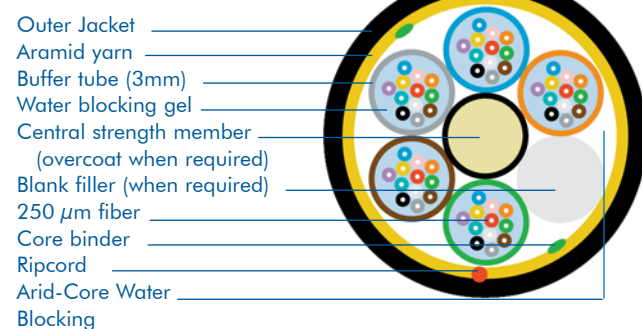
bbb is replaced by multimode fiber count

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Buffer tubes 13-18 repeat color sequence with tracer stripe.

Arid Core Stranded Loose Tube Non-Armored All Dielectric

(60 Fiber Version Shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Max. Long Term Load	135 lbs/600 N
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Arid-Core® Stranded Loose Tube Armored



Jacket/armor combinations for buried/underground/aerial use

Corrugated steel tape armor is strong yet flexible

ARID-CORE water blocking technology protects fibers from moisture /significantly reduces termination effort

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode

Standard color-coding on fibers and buffer tubes helps ease installation

Fiber types and grades available:

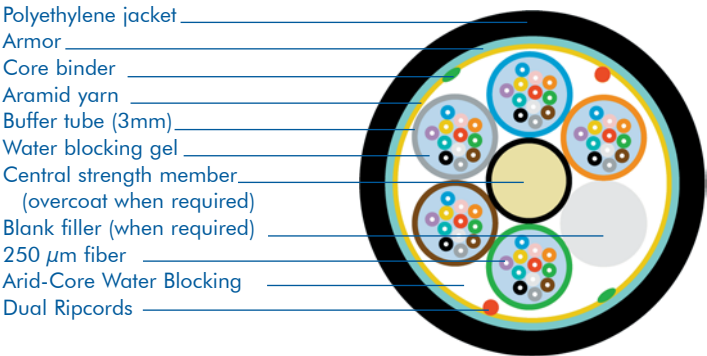
- Singlemode: (8H) 8.3/125µm High Performance 9.0 MFD Fiber and (8A) 8.3/125µm High Performance 9.3 MFD Fiber
- Multimode: (6U) UltraFiber™ 62.5/125µm, (6F) Enhanced FDDI 62.5/125µm, and (5H) High Performance 50/125µm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Single jacket/ single armor 2 - 72 Fiber	O-XXX-LA-XY-F12NS	.55/13.9	10.9/27.7	5.5/13.9	600/2700	440	5.9 N•m	126	188
74 - 96 Fiber	O-XXX-LA-XY-F12NS	.63/16.0	12.6/31.9	6.3/16.0	600/2700	440	5.9 N•m	158	236
98 - 120 Fiber	O-XXX-LA-XY-F12NS	.71/18.0	14.2/36.1	7.1/18.0	600/2700	440	8.8 N•m	185	276
122 - 144 Fiber	O-XXX-LA-XY-F12NS	.79/20.1	15.9/40.3	7.9/20.1	600/2700	440	11.8 N•m	208	310
146 - 216 Fiber	O-XXX-LA-XY-F12NS	.78/19.9	15.6/39.7	7.8/19.9	600/2700	440	11.8 N•m	219	326
218 - 288 Fiber	O-XXX-LA-XY-F12NS	.9/22.8	18.0/45.6	9.0/22.8	600/2700	440	11.8 N•m	285	425
Singlemode/Multimode Composite (4-216 fiber)	O-XXX-LA-CM-F12NS/XYaaa/XYbbb	Refer to above specifications.							

- Variables in the Catalog Number:
- XXX = Total Fiber Count
- XY = Fiber Grade
- 8H (8.3/125µm High Performance 9.0 MFD fiber)
- 8A (8.3/125µm High Performance 9.3 MFD fiber)
- 6U (UltraFiber 62.5/125µm)
- 6F (Enhanced FDDI 62.5/125µm)
- 5H (50/125µm)
- For Composites Only:
- aaa is replaced with singlemode fiber count
- bbb is replaced by multimode fiber count
- Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua
- Buffer tubes 13-18 repeat color sequence with tracer stripe.

Arid Core Stranded Loose Tube Armored

(60 fiber version shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Fiber Feeder®

Dielectric and armored designs for buried/underground/aerial use



Robust constructions offer excellent protection of fibers

An outstanding choice when space is at a premium

Small sizes and light weight reduces installation costs

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/c	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Fiber Feeder Dielectric 2 - 24 Fiber 4mm Tube Size	O-XXX-FN-XY-F12NS	.36/9.3	7.3/18.5	3.6/9.2	400/1800	440	3 N•m	53	79
Fiber Feeder Armored 2 - 24 Fiber	O-XXX-FA-XY-F12NS	.36/9.3	7.3/18.5	3.6/9.2	400/1800	440	3 N•m	67	100
Fiber Feeder Armored Self Supporting 2 - 24 Fiber .085 support rods	O-XXX-FS-XY-F12NS	Major Axis .44/11.2 Minor Axis .34/8.4	.88/22.4	.44/11.2	500/2200	440	3 N•m	95	142
See page 62 for sag and tension information									
Singlemode/Multimode Composite (4 - 24 fiber)	O-XXX-FS-CM-F12/XYaaa/XYbbb Refer to above specifications. -FA- -FN-								

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)

8A (8.3/125μm High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125μm)

aaa is replaced with singlemode fiber count

6F (Enhanced FDDI 62.5/125μm)

5H (50/125μm)

bbb is replaced by multimode fiber count

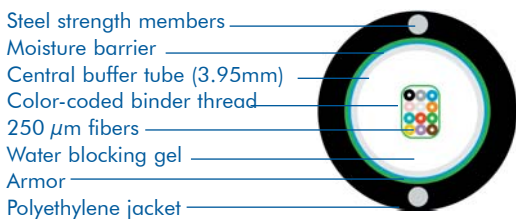
For Composites Only:

Fiber & Binder Thread
identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

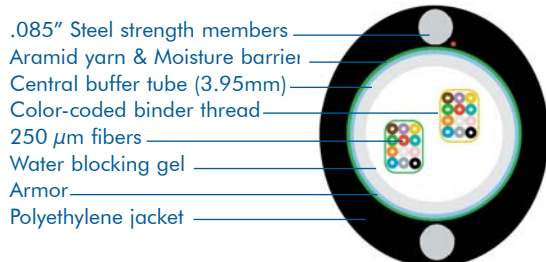
Fiber Feeder Armored Cable

(12 fiber version shown)



Fiber Feeder Armored Self Supporting Cable

(24 fiber version shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Central Tube



Dielectric and armored designs for buried/underground/aerial use



Robust constructions offer excellent protection of fibers

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Central Tube Dielectric 2 - 24 Fiber 4mm Tube Size 	O-XXX-CN-XY-F12NS	.43/11	8.7/22	4.3/11	600/2700	220	3 N•m	70	105
Central Tube Dielectric 26 - 48 Fiber 6mm Tube Size	O-XXX-CN-XY-F12NS	.49/12.5	9.8/24.9	4.9/12.5	600/2700	220	3 N•m	105	155
Central Tube Armored 2 - 24 Fiber 4mm Tube Size 	O-XXX-CA-XY-F12NS	.41/10.5	8.3/21.0	4.1/10.5	600/2700	440	3 N•m	85	127
Central Tube Armored 26 - 48 Fiber 6mm Tube Size	O-XXX-CA-XY-F12NS	.50/12.6	10.0/25.4	5.0/12.6	600/2700	440	3 N•m	115	171
Central Tube Armored 50 - 96 Fiber 8mm Tube Size	O-XXX-CA-XY-F12NS	.57/14.5	11.4/29.0	5.7/14.5	600/2700	440	5.8 N•m	152	226
Singlemode/Multimode Composite	O-XXX-CN-CM-F12NS/XYaaa/XYbbb -CA- Refer to above specifications.								

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125 μ m High Performance 9.0 MFD fiber)
8A (8.3/125 μ m High Performance 9.3 MFD fiber)
6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)
5H (50/125 μ m)

For Composites Only:
Fiber & Binder Thread
identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black,
9/Yellow, 10/Violet, 11/Rose, 12/Aqua

aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

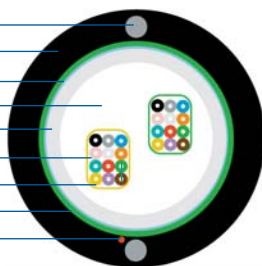
Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Central Tube Armored Cable

(24 Fiber Version Shown)

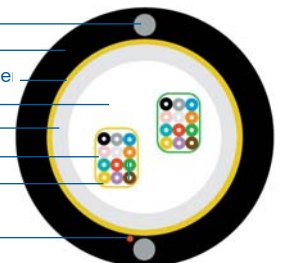
Steel strength members
Polyethylene jacket
Moisture barrier
Water blocking gel
Central buffer tube (6mm)
Color-coded binder thread
250 μ m fiber
Armor
Ripcord



Central Tube Non-Armored All Dielectric Cable

24 Fiber Dielectric Version

Dielectric strength members
Polyethylene jacket
Aramid Yarns & Moisture Barrier
Water blocking gel
Central buffer tube (6mm)
Color-coded binder thread
250 μ m fiber
Ripcord



Outside Plant Self-Supporting Figure 8 Stranded Loose Tube





Dielectric and armored designs for buried/underground/aerial use

ARID-CORE® water blocking technology protects fibers from moisture / reduces termination effort

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	Weight kg/ 1000m
Figure 8 Armored 2 - 72 Fiber 	M-XXX-LA-XY-F12NS	0.55/14	11.0/28.0	9.0/21.0	440	5.9 N•m	280	417
Figure 8 Non-Armored 2 - 72 Fiber 	M-XXX-LN-XY-F12NS	0.50/12.5	10.0/25.0	6.0/13.0	440	48 N•m	235	344
Singlemode/Multimode Composite (2-72 fiber)	M-XXX-LN-CM-F12NS/XYaaa/XYbbb -LA-	Refer to above specifications.						

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)
8A (8.3/125μm High Performance 9.3 MFD fiber)
6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)
5H (50/125μm)

For Composites Only:

aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Loading Capabilities: Meets the loading conditions of heavy, medium or light storm loading areas as defined in Rule 251 of the National Electric Safety Code (NESC).

Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Figure 8 Armored Cable

(60 fiber version shown)

Polyethylene jacket
Stranded 0.25 in. Messenger

Polyethylene jacket
Armor
Core binder
Aramid yarn
Buffer tube (3mm)
Water blocking gel
Central strength member
(overcoat when required)
Blank filler (when required)
250 μm fiber
Arid-Core Water Blocking
Dual Ripcords

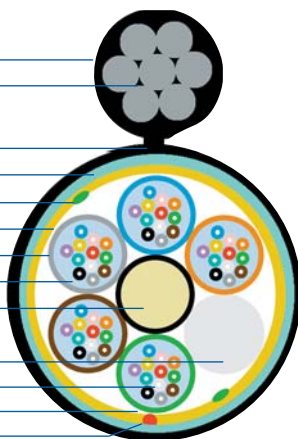
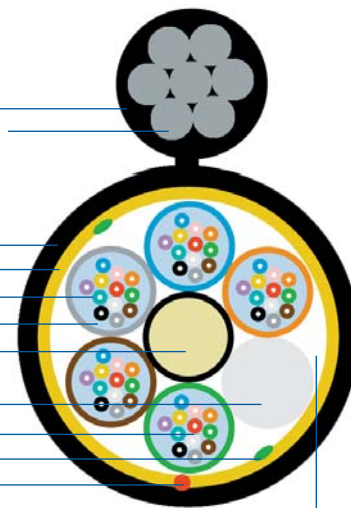


Figure 8 Non Armored Cable

(60 Fiber Version Shown)

Polyethylene jacket
Stranded 0.25 in. Messenger

Outer Jacket
Aramid yarn
Buffer tube (3mm)
Water blocking gel
Central strength member
(overcoat when required)
Blank filler (when required)
250 μm fiber
Core binder
Ripcord
Arid-Core Water
Blocking



Outside Plant Harsh Environment Stranded Loose Tube All Dielectric

Designs for standard and harsh outside plant operating conditions

Strong, durable triple jacketed constructions

ARID-CORE® water blocking technology protects fibers from moisture / reduces termination effort

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode


Harsh condition cable uses PVDF jacket which is resistant to gasoline and other solvents

Standard color-coding on fibers and buffer tubes for fast installations

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Harsh Conditions Triple jacket 2 - 72 Fiber	H-XXX-LN-XY-F12NS	.57.14.5	11.4/28.9	5.7/14.5	600/2700	440	48 N•m	135	194
									
Singlemode/Multimode Composite (4-72 fiber)	H-XXX-LN-CM-F12NS/XYaaa/XYbbb	Refer to above specifications.							

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125 μ m)

aaa is replaced with singlemode fiber count

6F (Enhanced FDDI 62.5/125 μ m)

5H (50/125 μ m)

bbb is replaced by multimode fiber count

For Composites Only:

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Harsh Environment Stranded Loose Tube All Dielectric Cable

(Triple jacket 60 fiber version shown)

1.25mm HDPE outer jacket

0.5mm PVDF middle jacket

0.8mm MDPE inner jacket

Aramid yarn

Buffer tube (3mm)

Water blocking gel

Central strength member

(overcoat when required)

Blank filler (when required)

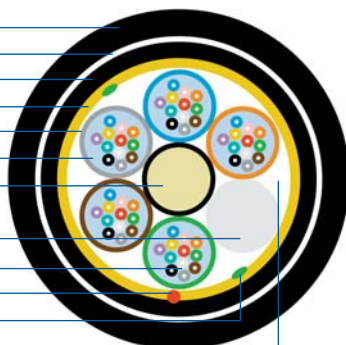
250 μ m fiber

Ripcord

Core binder

Arid Core Water

Blocking Compound



Mechanical Properties

Description	Specification
Operating Temp.	-55 to 80°C
Installation Temp.	-20 to 70°C
Storage Temp.	-55 to 80°C
Max. Long Term Load	135 lbs/600 N
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Specialty Designs Multi Jacketed Armored Stranded Loose Tube

Jacket/armor combinations for buried/underground/aerial use



Strong, durable double and triple jacketed construction with corrugated steel tape armor

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode

Standard color-coding on fibers and buffer tubes helps ease installation

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Double jacket/ single armor 2 - 72 Fiber 	O-XXX-L2-XY-F12NS	.65/16.5	13.0/33.0	6.5/16.5	600/2700	440	44 N•m	167	249
74 - 96 Fiber	O-XXX-L2-XY-F12NS	.71/17.9	14.2/35.8	7.1/17.9	600/2700	440	44 N•m	187	279
Triple jacket/ double armor 2 - 72 Fiber 	O-XXX-L3-XY-F12NS	.81/20.5	16.2/41.1	8.1/20.5	600/2700	440	44 N•m	291	434
Singlemode/Multimode Composite (4-72 fiber)	O-XXX-L2-CM-F12NS/XYaaa/XYbbb -L3-	Refer to above specifications.							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125 μ m)

aaa is replaced with singlemode fiber count

6F (Enhanced FDDI 62.5/125 μ m)

5H (50/125 μ m)

bbb is replaced by multimode fiber count

For Composites Only:

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Buffer tubes 13-18 repeat color sequence with tracer stripe.

Mechanical Properties

Description	Specification
Operating Temp.	-55 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-55 to 75°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Double Jacket/Single Armor Loose Tube Cable

(60 Fiber Version Shown)

Dual polyethylene jackets

Aramid yarn

Core binder

Buffer tube (3mm)

Central strength member

(overcoat when required)

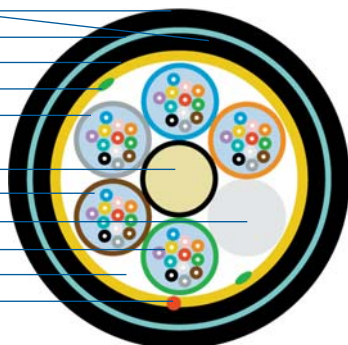
Water blocking gel

Blank filler (when required)

250 μ m fiber

Arid Core Water Blocking

Ripcord



Triple Jacket/Double Armor Loose Tube Cable

(60 Fiber Version Shown)

Triple polyethylene jackets

Dual armor

Core binder

Aramid yarn

Buffer tube (3mm)

Central strength member

(overcoat when required)

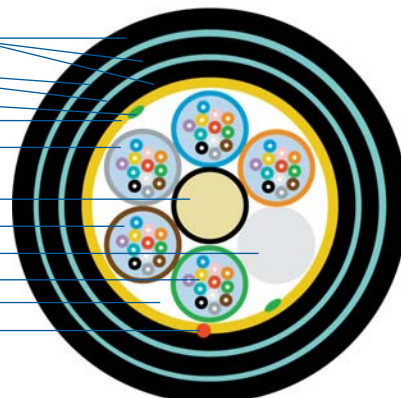
Water blocking gel

Blank filler (when required)

250 μ m fiber

Arid Core Water Blocking

Ripcord



Outside Plant Flooded Stranded Loose Tube All Dielectric



Designs for all outside plant conditions

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode

Standard color-coding on fibers and buffer tubes for fast installations

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Single jacket 2 - 72 Fiber	F-XXX-LN-XY-F12NS	.49/12.5	9.8/24.0	4.9/12.5	600/2700	220	2.9 N•m	77	115
74 - 96 Fiber	F-XXX-LN-XY-F12NS	.57/14.5	11.4/29.0	5.7/14.5	600/2700	220	5.9 N•m	102	152
98 - 120 Fiber	F-XXX-LN-XY-F12NS	.65/16.6	13.0/33.2	6.5/16.6	600/2700	220	8.8 N•m	121	181
122 - 144 Fiber	F-XXX-LN-XY-F12NS	.73/18.6	14.6/37.1	7.3/18.6	600/2700	220	11.8 N•m	136	203
146 - 216 Fiber	F-XXX-LN-XY-F12NS	.72/18.4	14.4/36.6	7.2/18.4	600/2700	220	11.8 N•m	146	218
218 - 288 Fiber	F-XXX-LN-XY-F12NS	.84/21.3	16.8/42.6	8.4/21.3	600/2700	220	11.8 N•m	198	295
Singlemode/Multimode Composite (4-288 fiber)	F-XXX-LN-CM-F12NS/XYaaa/XYbbb	Refer to above specifications.							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

5H (50/125 μ m)

For Composites Only:

aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

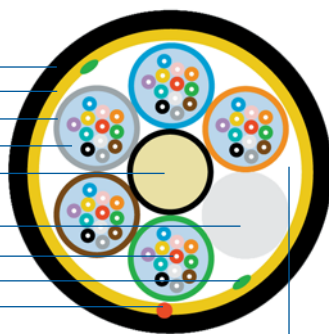
Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Buffer tubes 13-18 repeat color sequence with tracer stripe.

Flooded Stranded Loose Tube All Dielectric Cable

(60 Fiber Version Shown)

Outer Jacket
Aramid yarn
Buffer tube (3mm)
Water blocking gel
Central strength member
(overcoat when required)
Blank filler (when required)
250 μ m fiber
Core binder
Ripcord
Flooding compound



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Max. Long Term Load	135 lbs/600 N
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Flooded Stranded Loose Tube Armored



Jacket/armor combinations for buried/underground/aerial use

Corrugated steel tape armor is strong yet flexible

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode

Standard color-coding on fibers and buffer tubes helps ease installation

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/cm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Single jacket 2 - 72 Fiber	F-XXX-LA-XY-F12NS	.49/12.5	9.8/24.0	4.9/12.5	600/2700	220	2.9 N•m	77	115
74 - 96 Fiber	F-XXX-LA-XY-F12NS	.57/14.5	11.4/29.0	5.7/14.5	600/2700	220	5.9 N•m	102	152
98 - 120 Fiber	F-XXX-LA-XY-F12NS	.65/16.6	13.0/33.2	6.5/16.6	600/2700	220	8.8 N•m	121	181
122 - 144 Fiber	F-XXX-LA-XY-F12NS	.73/18.6	14.6/37.1	7.3/18.6	600/2700	220	11.8 N•m	136	203
146 - 216 Fiber	F-XXX-LA-XY-F12NS	.72/18.4	14.4/36.6	7.2/18.4	600/2700	220	11.8 N•m	146	218
218 - 288 Fiber	F-XXX-LA-XY-F12NS	.84/21.3	16.8/42.6	8.4/21.3	600/2700	220	11.8 N•m	198	295
Singlemode/Multimode Composite (4-288 fiber)	F-XXX-LA-CM-F12NS/XYaaa/XYbbb	Refer to above specifications.							

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

5H (50/125 μ m)

For Composites Only:

aaa is replaced with singlemode fiber count

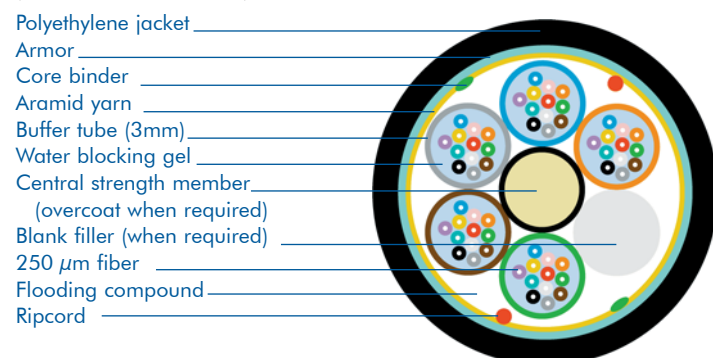
bbb is replaced by multimode fiber count

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Buffer tubes 13-18 repeat color sequence with tracer stripe.

Stranded Loose Tube Armored Cable

(60 Fiber Version Shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-20
Impact Resistance	> Bellcore GR-20
Flexing	> Bellcore GR-20
Twist/Bend	> Bellcore GR-20

Outside Plant Cable-in-Conduit



Conduit/cable assembly cuts installation effort and cost

Smooth-wall conduit made of grade P34 polyethylene to meet ASTM D1248

Conduit treated with high concentrations of UV stabilizers and antioxidants

Available in three different diameters - 1 inch/25mm, 1.125in/29mm and 2.00in/32mm

Two different wall thicknesses - SDR 13.5 and SDR 11

Cable types other than those shown are available - contact your field sales representative

Cable Type Fiber Count	Fiber Cable Catalog Number	Available Conduit Diameters inch/mm	Cable Diameter inch/mm	Available Wall Thicknesses (SDR)	Available lengths Available Conduit Colors	English Weight SDR 13.5 & 11 lbs/1000'	Metric Weight kg/1000m
Fiber Feeder Armored 2 - 24 Fiber	O-XXX-FA-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.36/9.1	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	236 & 271 280 & 326 332 & 387	352 & 403 417 & 455 494 & 576
Central Tube Dielectric 26 - 48 Fiber	O-XXX-CN-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.49/12.5	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	273 & 308 317 & 365 369 & 424	355 & 407 421 & 526 499 & 709
Central Tube Armored 26 - 48 Fiber	O-XXX-CA-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.49/12.5	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	283 & 318 327 & 373 379 & 434	365 & 522 536 & 575 613 & 695
Central Tube Armored 49 - 96 Fiber	O-XXX-CA-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.57/14.5	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	320 & 355 364 & 411 416 & 471	402 & 454 468 & 507 546 & 628
Single Jacket Loose Tube Dielectric 2 - 72 Fiber	O-XXX-LN-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.49/12.5	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	273 & 308 317 & 363 369 & 424	355 & 407 421 & 526 499 & 709
Single Jacket Loose Tube Dielectric 74 - 96 Fiber	O-XXX-LN-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.57/14.5	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	305 & 349 349 & 398 401 & 456	388 & 439 453 & 492 530 & 613
Single Jacket Loose Tube Dielectric 98 - 120 Fiber	O-XXX-LN-XY-F12NS Specify Conduit OD, SDR and Color	1.0/25.4 1.125/28.6 1.25/31.8	.65/16.6	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	340 & 375 384 & 431 436 & 491	423 & 475 488 & 527 566 & 648
Single Jacket Loose Tube Dielectric 122 - 144 Fiber	O-XXX-LN-XY-F12NS Specify Conduit OD, SDR and Color	1.125/28.6 1.25/31.8	.73/18.6	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	397 & 443 449 & 504	501 & 540 579 & 661
Single Jacket Loose Tube Dielectric 146 - 216 Fiber	O-XXX-LN-XY-F12NS Specify Conduit OD, SDR and Color	1.125/28.6	.72/18.4	13.5 and 11	0.5 km - 1 km & 1.1 km - 2 km Black or Terra Cotta	398 & 444	502 & 541

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)

8A (8.3/125μm High Performance 9.3 MFD fiber)

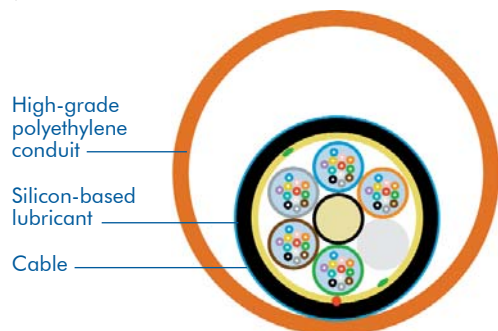
6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)

5H (50/125μm)

Typical Cable-in-Conduit

(60 fiber stranded loose tube all dielectric version shown)



Mechanical Properties

Description	Designation
Density (g/cm ³)	D792A/D1505
Min. Tensile @ yield	D638-82a
Min. Elongation	D638-82a
ESCR, 10% Igepal	D1693-80
Low-temp brittleness	D746-79
Moisture Content	CS TIP #307
Carbon Black	D1603
Min. Flexural Modulus	D790-81

Indoor/Outdoor Cables (OFNR)

Riser-rated designs are rugged for outdoor and safe for indoor



CommScope indoor/outdoor tight buffer cables are designed to meet the rigors of outside plant while allowing for direct connectorization of the individual fibers, yet meet the NEC/CEC requirement of "OFNR".

CommScope indoor/outdoor loose tube cables are a unique hybrid - they are made tough enough to withstand the rigors of the outside plant environment (the buffer tubes are filled with a gel compound that blocks moisture flow while protecting the fiber), yet are made of materials that permit them to meet OFNR requirements.

Indoor/outdoor cables allow a cable to be run from outside a building to the inside without changing cable types, thus avoiding the extra time and labor of an additional splice point. Their riser rating makes this possible.

Another technical achievement in CommScope's indoor/outdoor cables is the use of our **ARID-CORE®** dry water-blocking technology. Instead of the traditional hard-to-clean flooding gel, **ARID-CORE** remains dry inside the cable. Once exposed to moisture, **ARID-CORE** rapidly swells to form a gel that stops water penetration. The result is a craft-friendly cable that significantly reduces termination time, effort and cost.

We offer several constructions, which include:

Triathlon™ Low Smoke/Zero-Halogen (LSZH) Distribution cables of up to 24 tight buffered fibers.

Triathlon Low Smoke/Zero-Halogen (LSZH) Cordage in simplex, duplex zipcord and two-fiber interconnect tight buffered designs.

Fiber Feeder® cables of up to 24 fibers in compact single tube all dielectric construction.

Central Tube cables of up to 96 fibers in a robust all dielectric design.

Stranded Loose Tube cables of up to 288 fibers in a dielectric construction.



Triathlon™ Indoor/Outdoor LSZH Distribution

Low smoke-zero halogen construction permits riser use as well



Black or colored jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR) safety standards

Riser rating eliminates splice points at the building entrance

ARID-CORE® water blocking technology protects fibers from moisture

Low-smoke zero-halogen gives added protection to building occupants and equipment

Tight buffered construction reduces installation cost

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
4 Fiber (no central member)	Z-ØØ4-DS-XY-FSDBK	.16/4.0	3.2/8.0	1.6/5.5	300/1350	100/445	15	22
6 Fiber	Z-ØØ6-DS-XY-FSDBK	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	20	30
8 Fiber	Z-ØØ8-DS-XY-FSDBK	.25/6.4	5.0/12.8	2.5/6.4	300/1350	100/445	24	35
12 Fiber	Z-Ø12-DS-XY-FSDBK	.29/7.4	5.8/14.8	2.9/7.4	400/1800	140/600	38	56
18 Fiber	Z-Ø18-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	60	88
24 Fiber	Z-Ø24-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	49	72
Singlemode/Multimode Composite (4 - 24 fiber)	Z-ØØØ-DS-CM-FSDBK/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)

8A (8.3/125μm High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)

5H (50/125μm)

For Composites Only:

aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

Fiber identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

Triathlon LSZH Indoor/Outdoor-Riser Distribution Cable

(24 fiber version shown)

Low smoke/zero halogen (LSZH) jacket

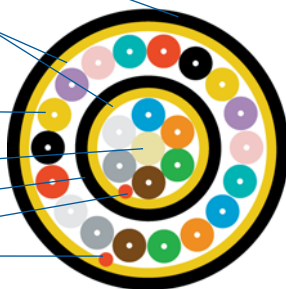
Dielectric strength members/
moisture barrier

900 μm LSZH tight- buffered
250 μm fiber

Dielectric central member

LSZH inner jacket

Ripcords



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Triathlon™ Indoor/Outdoor LSZH Cordage

Low smoke-zero halogen construction permits riser use as well



Black or colored jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR) safety standards

Riser rating eliminates splice points at the building entrance

ARID-CORE® water blocking technology protects fibers from moisture

Low-smoke zero-halogen gives added protection to building occupants and equipment





Simplex, duplex and zipcord cables available in a variety of sizes

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/ 1000'	kg/ 1000m
Simplex/2.0mm 	Z-ØØ1-SP-XY-F2ØBK	0.08/2.0	1.8/4.6	0.9/2.3	50/225	16/71	3.0	4.5
Simplex/2.5mm Special Minimum Order Required	Z-ØØ1-SP-XY-F25BK	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8	8.6
Simplex/2.9mm Standard	Z-ØØ1-SP-XY-F29BK	0.11/2.9	2.2/5.8	1.1/2.8	60/260	20/90	6.7	9.9
Duplex/2.5mm Standard 	Z-ØØ2-DU-XY-F25BK	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.5	20.1
Zipcord/2.5mm Special Minimum Order Required 	Z-ØØ2-ZC-XY-F25BK	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
Zipcord/2.9mm Standard	Z-ØØ2-ZC-XY-F29BK	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8	23.5
2 fiber interconnect 	Z-ØØ2-IC-XY-FSDBK	.14/36	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

Variables in the Catalog Number:

XY = FiberGrade

8H (8.3/125μm High Performance 9.0 MFD fiber)

8A (8.3/125μm High Performance 9.3 MFD fiber)

6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)

5H (50/125μm)

Fiber identification colors:

1/Blue, 2/White

Triathlon Indoor/Outdoor LSZH Simplex

LSZH jacket

900μm LSZH tight-buffered

250μm fiber

Aramid Yarn



Triathlon Indoor/Outdoor LSZH Duplex

LSZH outer jacket

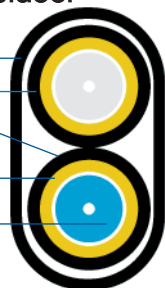
LSZH jackets

Aramid yarn

900μm LSZH

tight-buffered

250μm fiber



Triathlon Indoor/Outdoor LSZH 2-fiber Interconnect

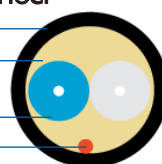
LSZH jacket

Aramid yarn

900μm LSZH tight-buffered

250μm fibers

Ripcord



Triathlon Indoor/Outdoor LSZH Zipcord

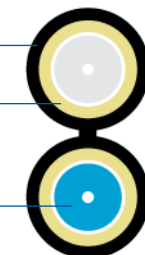
LSZH jacket

Aramid yarn

900μm LSZH

tight-buffered

250μm fiber



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Indoor/Outdoor Stranded Loose Tube

Standard and heavy-duty double-jacket versions

All meet critical NEC/CEC riser (OFNR) safety standards eliminating the need for splice point at building entrance

ARID-CORE® water blocking technology protects fibers from moisture

Dual jacket (PVC/PVDF) version offers additional mechanical and chemical protection

Standard color-coding on fibers and buffer tubes helps ease installation

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Product Type Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/ 1000'	kg/ 1000m
Standard 2 - 72 fibers	R-XXX-LN-XY-F12BK	.53/13.3	10.6/26.9	5.3/13.3	600/2700	135/600	119	177
74 - 96 fibers	R-XXX-LN-XY-F12BK	.58/14.7	11.6/29.5	5.8/14.7	600/2700	135/600	145	216
98 - 144 fibers	R-XXX-LN-XY-F12BK	.73/18.5	14.6/37.1	7.3/18.5	600/2700	135/600	225	335
Singlemode/Multimode Composite (4 - 144 fiber)	R-XXX-LN-CM-F12BK/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						
Heavy Duty Dual jacket 2 - 72 fibers	R-XXX-LH-XY-F12BK	.57/14.5	11.4/28.9	5.7/14.5	600/2700	135/600	135	194
74 - 96 fibers	R-XXX-LH-XY-F12BK	.62/15.7	12.4/31.5	6.2/15.7	600/2700	135/600	165	246
98 - 144 fibers	R-XXX-LH-XY-F12BK	.77/19.6	15.4/39.1	7.7/19.6	600/2700	135/600	250	373
Singlemode/Multimode Composite (4 - 144 fiber)	R-XXX-LH-CM-F12BK/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)
8A (8.3/125μm High Performance 9.3 MFD fiber)
6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)
5H (50/125μm)

For Composites Only:

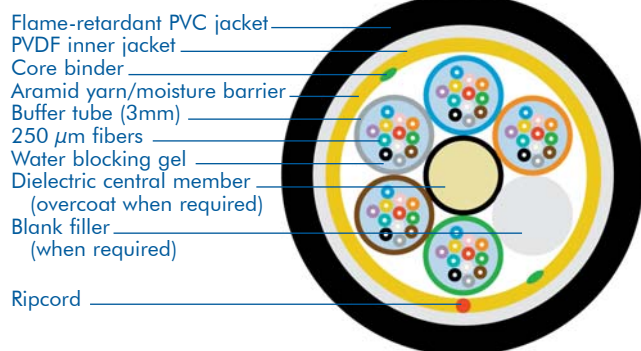
aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Indoor/Outdoor Stranded Loose Tube

(Dual Jacket 60 Fiber Version Shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Indoor/Outdoor Fiber Feeder® & Central Tube

Multiple constructions to meet your specific application





All meet critical NEC/CEC riser (OFNR) safety standards eliminating the need for splice point at building entrance

ARID-CORE® water blocking technology protects fibers from moisture

Standard color-coding on fibers helps ease installation

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Product Type Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius		Max. Tensile Load		Weight	
			Loaded inch/cm	Unloaded inch/cm	Short term lbs./ Newtons	Long term lbs./ Newtons	lbs/ 1000'	kg/ 1000m
Fiber Feeder 2 - 24 fibers	R-XXX-FN-XY-F12BK	.39/9.9	7.8/19.8	3.9/9.9	300/1350	90/400	75	112
 4 mm Tube Size								
Singlemode/Multimode Composite (4 - 24 fiber)	R-XXX-FN-CM-F12BK/XYaaa/XYbbb	Custom design - specs will vary depending on fiber count						
Central Loose Tube 26 - 48 fibers	R-XXX-CN-XY-F12BK	.49/12.5	9.8/25.0	4.9/12.5	300/1350	90/400	105	156
 6 mm Tube Size								
Singlemode/Multimode Composite (2-48 fiber)	R-XXX-CN-CM-F12BK/XYaaa/XYbbb	Custom design - specs will vary depending on fiber count						

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)

6F (Enhanced FDDI 62.5/125μm)

8A (8.3/125μm High Performance 9.3 MFD fiber)

5H (50/125μm)

6U (UltraFiber 62.5/125μm)

For Composites Only:
Fiber & Binder

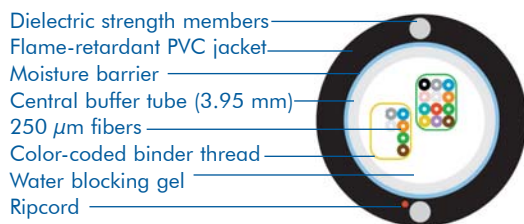
aaa is replaced with singlemode fiber count

bbb is replaced by multimode fiber count

Thread identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

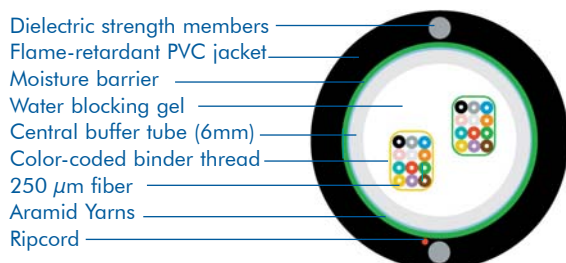
Indoor/Outdoor Fiber Feeder Cable

(18 fiber version shown)



Indoor/Outdoor Central Tube Cable

(24 fiber version shown)



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Cables

Riser and plenum-rated designs for indoor applications



CommScope premises cables were engineered with two goals in mind - excellent mechanical/optical performance coupled with superior fire safety ratings. These goals are achieved in a family of cables that meet all critical NEC/CEC requirements for riser or plenum applications while offering unique resistance to installation and termination stresses.

Our distribution cables are a perfect example of this achievement. Subunits of 12 fibers are engineered into constructions that are up to 30% smaller in diameter and 50% lighter than comparable products. The result is a compact cable that installs and terminates easily.

Premises fiber optic cable meet or exceed performance standards as established by Bellcore GR-409, TIA/EIA 568B, ICEA 83-596, ANSI X3.166-1990 & X3T9.5 PMD, FDDI, ATM, Fibre Channel and HIPPI.

We offer several constructions, which include:

Riser and Plenum Distribution cables of up to 144 fibers in a lightweight and compact construction.

Heavy-Duty Riser and Plenum Distribution cables of 6 to 24 fibers with a robust construction.

Low Smoke/Zero-Halogen Distribution cables of up to 24 fibers which can be used outdoor as well, thus eliminating the need to change cable types at the building entrance.

Riser and Plenum Breakout cables of up to 24 individually jacketed fibers in a single unit.

Riser and Plenum Cordage in simplex, duplex zipcord and two-fiber interconnect.

Riser and Plenum Cables will follow Bellcore GR-409 jacket color code specs: single mode is yellow and multimode and composites are orange.



Fast Fiber is a CommScope designed quick-ship program that allows YOU the customer to place an order for Fast Fiber products and receive it within 24 hours.

Rules & Guidelines

- Maximum order quantity per customer, per product, per day is 2 kms (or 6,560 ft.)
- Minimum cut length is 250 feet
- Freight allowed on orders of \$5,000 or more
- Pull and cuts are FREE on available Fast Fiber products
- Orders placed by 12 noon Eastern will be available for shipment next business day
- Orders placed after 12 noon Eastern on Friday will be available for shipment the following Monday
- Reels are non-returnable and non-refundable

Products Available

- Riser Cordage
 - Riser Interconnect
 - Riser Zipcord
- Riser Distribution
 - Riser Distribution 4-12
 - Riser Distribution 24
- Plenum Cordage
 - Plenum Interconnect
 - Plenum Zipcord
- Plenum Distribution
 - Plenum Distribution 4-12
 - Plenum Distribution 24
- Low Smoke Zero Halogen Distribution 4-12

Meets critical NEC riser (OFNR) safety standards

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Numbered subunits and color-coded fibers help ease installation

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./ Newtons	Weight lbs/ 1000'	kg/ 1000m
4 Fiber	R-ØØ4-DS-XY-FSDZZ	.16/4.0	3.2/8.0	1.6/4.1	300/1350	100/445	15	22
6 Fiber	R-ØØ6-DS-XY-FSDZZ	.20/5.3	4.0/10.6	2.0/5.3	300/1350	100/445	16	24
8 Fiber	R-ØØ8-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
12 Fiber	R-Ø12-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
18-24 Fiber	Available in Heavy-Duty only- see page 53.							
30 Fiber (3 subunits)	R-Ø3Ø-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
36 Fiber (3 subunits)	R-Ø36-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
48 Fiber (4 subunits)	R-Ø48-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
60 Fiber (5 subunits)	R-Ø6Ø-DS-XY-FSDZZ	.70/17.8	14.4/36.8	7.2/18.4	1000/4450	330/1470	186	277
72 Fiber (6 subunits)	R-Ø72-DS-XY-FSDZZ	.77/19.6	14.4/36.8	7.2/18.4	1000/4450	330/1470	183	273
96 Fiber (8 subunits)	R-Ø96-DS-XY-FSDZZ	.80/20.4	16.0/40.8	8.0/20.4	1000/4450	330/1470	223	332
144 Fiber (12 subunits)	R-144-DS-XY-FSDZZ	.98/25.0	19.6/49.8	19.6/9.8	1000/4450	330/1470	288	429
Singlemode/Multimode Composite (4 - 144 fiber)	R-XXX-DS-CM-FSDOR/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						



Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Subunits are numbered for easy identification

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Riser Distribution Cables

(72 and 12 fiber versions shown)

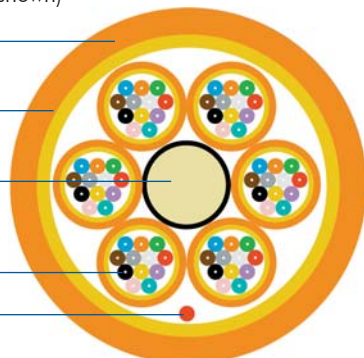
Riser-rated
PVC jacket

Aramid yarn

Dielectric central member
(with overcoat)

12 fiber subunit with
900 μ m tight-buffered
250 μ m fiber

Ripcord



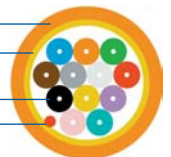
12 Fiber Unit

Riser-rated PVC jacket

Aramid yarn

12 fiber subunit with
900 μ m tight-buffered 250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Heavy-Duty Riser Distribution

Central strength member provides additional fiber support



Meets critical NEC riser (OFNR) safety standards

Overcoated dielectric central strength member for additional strength and support

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
6 Fiber	R-ØØ6-DS-XY-FHDZZ	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	20	30
8 Fiber	R-ØØ8-DS-XY-FHDZZ	.25/6.4	5.0/12.8	2.5/6.4	300/1350	100/445	24	35
12 Fiber	R-Ø12-DS-XY-FHDZZ	.29/7.4	5.8/14.8	2.9/7.4	400/1800	140/600	38	56
18 Fiber	R-Ø18-DS-XY-FHDZZ	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	60	88
24 Fiber	R-Ø24-DS-XY-FHDZZ	.44/11.2	8.8/22.4	4.4/11.2	600/2700	160/710	87	130
Singlemode/Multimode Composite (6 - 24 fiber)	R-XXX-DS-CM-FHDOR/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Premises Riser Heavy-Duty Distribution Cable

(12 fiber version shown)

Riser-rated PVC jacket

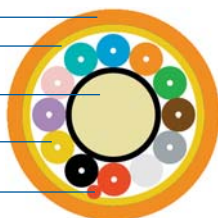
Aramid yarn

Dielectric central member
(with overcoat)

900 μ m tight-buffered

250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Meets critical NEC plenum (OFNP) safety standards

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Numbered subunits and color-coded fibers help ease installation

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./Newtons	Long term lbs./Newtons	Weight lbs./ 1000'	kg/ 1000m
4 Fiber	P-ØØ4-DS-XY-FSDZZ	.16/4.0	3.2/8.0	1.6/4.1	300/1350	100/445	15	22
6 Fiber	P-ØØ6-DS-XY-FSDZZ	.20/5.3	4.0/10.6	2.0/5.3	300/1350	100/445	16	24
8 Fiber	P-ØØ8-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
12 Fiber	P-Ø12-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
18-24 Fiber	Available in Heavy-Duty only- see page 53.							
30 Fiber (3 subunits)	P-Ø3Ø-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
36 Fiber (3 subunits)	P-Ø36-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
48 Fiber (4 subunits)	P-Ø48-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
60 Fiber (5 subunits)	P-Ø6Ø-DS-XY-FSDZZ	.70/17.8	14.4/36.8	7.2/18.4	1000/4450	330/1470	186	277
72 Fiber (6 subunits)	P-Ø72-DS-XY-FSDZZ	.77/19.6	14.4/36.8	7.2/18.4	1000/4450	330/1470	183	273
96 Fiber (8 subunits)	P-Ø96-DS-XY-FSDZZ	.80/20.4	16.0/40.8	8.0/20.4	1000/4450	330/1470	223	332
144 Fiber (12 subunits)	P-144-DS-XY-FSDZZ	.98/25.0	19.6/49.8	19.6/9.8	1000/4450	330/1470	288	429
Singlemode/Multimode Composite (4 - 144 fiber)	P-XXX-DS-CM-FSDOR/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Subunits are numbered for easy identification

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

12 Fiber Subunit

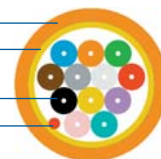
Plenum-rated PVC jacket

Aramid yarn

12 fiber subunit with

900 μ m tight-buffered 250 μ m fiber

Ripcord



Plenum Distribution Cables

(72 and 12 fiber versions shown)

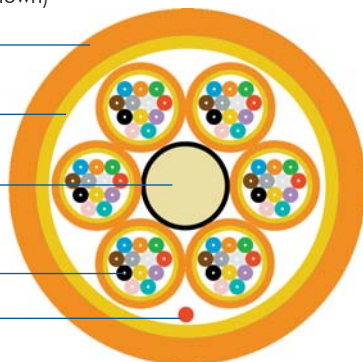
Plenum-rated
PVDF jacket

Aramid yarn

Dielectric central member
(with overcoat)

12 fiber subunit with
900 μ m tight-buffered
250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Heavy-Duty Plenum Distribution

Central strength member provides additional fiber support



Meets critical NEC plenum (OFNP) safety standards

Overcoated dielectric central strength member for additional strength and support

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs./ 1000'	Weight kg/ 1000m
6 Fiber	P-ØØ6-DS-XY-FHDZZ	.17/4.3	3.4/8.6	1.7/4.3	300/1350	100/445	16	24
8 Fiber	P-ØØ8-DS-XY-FHDZZ	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	22	33
12 Fiber	P-Ø12-DS-XY-FHDZZ	.24/6.1	4.8/11.2	2.4/6.1	400/1800	140/600	28	42
18 Fiber	P-Ø18-DS-XY-FHDZZ	.33/8.4	6.6/16.8	3.3/8.4	600/2700	160/710	53	79
24 Fiber	P-Ø24-DS-XY-FHDZZ	.40/10.2	8.0/20.4	4.0/10.2	600/2700	160/710	75	112
Singlemode/Multimode Composite (6 - 24 fiber)	P-XXX-DS-CM-FHDOR/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Premises Plenum Heavy-Duty Distribution Cable

(12 fiber version shown)

Plenum-rated PVC jacket

Aramid yarn

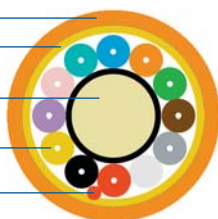
Dielectric central member

(with overcoat)

900 μ m tight-buffered

250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Triathlon™ Premises Riser/LSZH Distribution



Can be used both as a riser and indoor/outdoor cable

Meets critical NEC riser (OFNR) safety standards yet rugged enough for outdoor use

ARID-CORE® water blocking technology protects fibers from moisture

Riser rating eliminates splice points at the building entrance

Low-smoke zero-halogen gives added protection to building occupants and equipment

Dielectric central member on 6 to 24 fiber versions for strength and support

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
4 Fiber (no central member)	Z-ØØ4-DS-XY-FSDBK	.16/4.0	3.2/8.0	1.6/5.5	300/1350	100/445	15	22
6 Fiber	Z-ØØ6-DS-XY-FSDBK	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	20	30
8 Fiber	Z-ØØ8-DS-XY-FSDBK	.25/6.4	5.0/12.8	2.5/6.4	300/1350	100/445	24	35
12 Fiber	Z-Ø12-DS-XY-FSDBK	.29/7.4	5.8/14.8	2.9/7.4	400/1800	140/600	38	56
18 Fiber	Z-Ø18-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	60	88
24 Fiber	Z-Ø24-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	49	72
Singlemode/Multimode Composite (4 - 24 fibers)	Z-XXX-DS-CM-FSDBK/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

6U (UltraFiber 62.5/125μm)

6F (Enhanced FDDI 62.5/125μm)

8A (8.3/125μm High Performance 9.3 MFD fiber)

aaa is replaced with singlemode fiber count

5H (50/125μm)

8H (8.3/125μm High Performance 9.0 MFD fiber)

bbb is replaced by multimode fiber count

For Composites Only:

Fiber identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

Triathlon Indoor/Outdoor LSZH Riser Distribution Cable

(24 fiber version shown)

Low smoke/zero halogen (LSZH) jacket

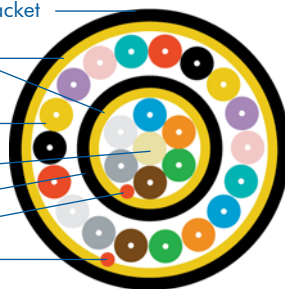
Aramid yarn/moisture barrier

900 μm LSZH tight-buffered
250 μm fiber

Dielectric central member

LSZH inner jacket

Ripcords



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Riser Breakout

Robust design for easy handling and termination



Meets critical NEC riser (OFNR) safety standards

Individual subunits are rugged and flexible

Dielectric central member on 6 to 24 fiber versions for added strength and support

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

2.5mm subunit Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/ 1000'	kg/ 1000m
4 Fiber (no central member)	R-ØØ4-BO-XY-FSDZZ	.34/8.6	6.8/17.2	3.4/8.6	300/1330	110/490	55	81
6 Fiber	R-ØØ6-BO-XY-FSDZZ	.37/9.4	7.4/18.8	3.7/9.4	560/2500	200/890	76	113
8 Fiber	R-ØØ8-BO-XY-FSDZZ	.43/10.9	8.6/21.8	4.3/10.9	560/2500	200/890	90	134
12 Fiber	R-Ø12-BO-XY-FSDZZ	.50/12.7	10/25.4	5.0/12.7	600/2700	224/1000	120	179
18 Fiber	R-Ø18-BO-XY-FSDZZ	.59/15.0	11.8/30.0	5.9/15.0	600/2700	224/1000	191	283
24 Fiber	R-Ø24-BO-XY-FSDZZ	.61/15.5	12.2/31.0	6.1/15.5	800/3550	265/1175	191	283
Singlemode/Multimode Composite (4 - 24 fiber)	R-XXX-BO-CM-FSDOR/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Subunit identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua
Fibers 13-24: repeat color sequence with tracer stripe

Riser Breakout Cable

(12 fiber version shown)

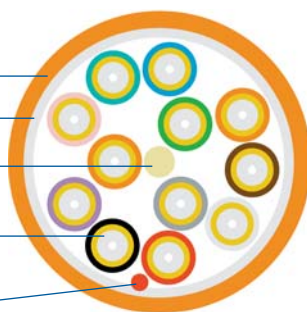
Riser-rated
PVC jacket

Core wrap

Dielectric central member

2.5mm subunit
with 900 μ m tight-buffered
250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Plenum Breakout

Robust design for easy handling and termination



Meets critical NEC plenum (OFNP) safety standards

Individual subunits are rugged and flexible

Dielectric central member on 6 to 24 fiber versions for strength and support

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

2.5mm subunit Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/ 1000'	kg/ 1000m
4 Fiber (no central member)	P-ØØ4-BO-XY-FSDZZ	.27/6.9	5.4/13.8	2.7/6.9	300/1330	110/490	55	81
6 Fiber	P-ØØ6-BO-XY-FSDZZ	.34/8.6	6.8/17.6	3.4/8.6	560/2500	224/1000	63	93
8 Fiber	P-ØØ8-BO-XY-FSDZZ	.40/10.0	8.0/20.0	4.0/10.0	560/2500	224/1000	81	120
12 Fiber	P-Ø12-BO-XY-FSDZZ	.50/12.7	10.0/25.4	5.0/12.7	600/2700	224/1000	90	132
18 Fiber	P-Ø18-BO-XY-FSDZZ	.60/15.2	12.0/30.4	6.0/15.2	600/2700	224/1000	173	258
24 Fiber	P-Ø24-BO-XY-FSDZZ	.61/15.5	12.2/31.0	6.1/15.5	600/2700	224/1000	191	283
Singlemode/Multimode Composite (4 - 24 fiber)	P-XXX-BO-CM-FSDOR/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						



Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Subunit identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Plenum Breakout Cable

(12 fiber version shown)

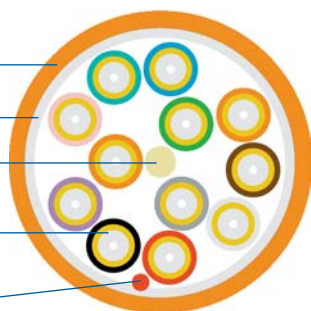
Plenum-rated
PVDF jacket

Core wrap

Dielectric central member

2.5mm subunit
with 900 μ m tight-buffered
250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Riser Cordage

Several constructions available for a variety of uses



Meets critical NEC riser (OFNR) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables absorb extra handling stresses

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/1000'	kg/1000m
Simplex/1.8mm	R-ØØ1-SP-XY-F18ZZ	0.07/1.8	1.8/4.6	0.9/2.3	50/225	20/90	2.1	3.1
Simplex/2.0mm Special Minimum Order Required	R-ØØ1-SP-XY-F20ZZ	0.08/2.0	1.6/4.0	0.8/2.0	50/225	16/71	3.0	4.5
Simplex/2.5mm Special Minimum Order Required	R-ØØ1-SP-XY-F25ZZ	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8	8.6
Simplex/2.9mm Standard	R-ØØ1-SP-XY-F29ZZ	0.11/2.9	2.2/5.8	1.1/2.9	60/260	20/90	6.7	9.9
Duplex/2.5mm	R-ØØ2-DU-XY-F25ZZ	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.9	20.7
Zipcord/2.5mm Special Minimum Order Required	R-ØØ2-ZC-XY-F25ZZ	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
Zipcord/2.9mm Standard	R-ØØ2-ZC-XY-F29ZZ	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8	23.5
2 fiber interconnect	R-ØØ2-IC-XY-F29ZZ	0.11/2.9	2.3/5.8	1.2/2.9	150/660	50/220	7.3	10.8
2 fiber interconnect	R-ØØ2-IC-XY-FSDZZ	0.14/3.6	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

Variables in the Catalog Number:

XY = Fiber Grade

ZZ = Standard Jacket Color

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

1/Blue, 2/White

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

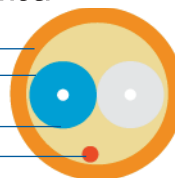
Riser Simplex

Riser-rated PVC jacket
900 μ m tight-buffered
250 μ m fiber
Aramid Yarn



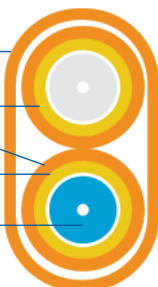
Riser 2-fiber Interconnect

Riser-rated PVC jacket
Aramid Yarn
900 μ m tight-buffered
250 μ m fibers
Ripcord



Riser Duplex

Riser-rated
PVC outer jacket
Riser-rated
PVC jackets
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Riser Zipcord

Riser-rated
PVC jacket
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Standard Cordage Jacket Colors

Singlemode - Yellow
Multimode - Orange

Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Premises Plenum Cordage



Several constructions available for a variety of uses

Meets critical NEC plenum (OFNP) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables absorb extra handling stress

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs./ 1000'	Weight kg/ 1000m
Simplex/1.8mm	P-ØØ1-SP-XY-F18ZZ	0.07/1.8	1.8/4.6	0.9/2.3	50/225	20/90	2.1	3.1
Simplex/2.0mm Special Minimum Order Required	P-ØØ1-SP-XY-F20ZZ	0.08/2.0	1.6/4.0	0.8/2.0	50/225	16/71	3.0	4.5
Simplex/2.5mm Special Minimum Order Required	P-ØØ1-SP-XY-F25ZZ	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8	8.6
Simplex/2.9mm Standard	P-ØØ1-SP-XY-F29ZZ	0.11/2.9	2.2/5.8	1.1/2.9	60/260	20/90	6.7	9.9
Duplex/2.5mm	P-ØØ2-DU-XY-F25ZZ	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.9	20.7
Zipcord/2.5mm Special Minimum Order Required	P-ØØ2-ZC-XY-F25ZZ	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
Zipcord/2.9mm Standard	P-ØØ2-ZC-XY-F29ZZ	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8	23.5
2 fiber interconnect	P-ØØ2-IC-XY-F29ZZ	0.11/2.9	2.3/5.8	1.2/2.9	150/660	50/220	7.3	10.8
2 fiber interconnect	P-ØØ2-IC-XY-FSDZZ	0.14/3.6	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

Variables in the Catalog Number:

XY = Fiber Grade

ZZ = Standard Jacket Color

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

1/Blue, 2/White

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

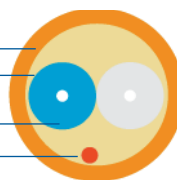
Plenum Simplex

Plenum-rated PVC jacket
900 μ m tight-buffered
250 μ m fiber
Aramid Yarn



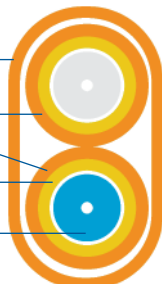
Plenum 2-fiber Interconnect

Plenum-rated PVC jacket
Aramid Yarn
900 μ m tight-buffered
250 μ m fibers
Ripcord



Plenum Duplex

Plenum-rated
PVC outer jacket
Plenum-rated
PVC jackets
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Plenum Zipcord

Plenum-rated
PVC jacket
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Standard Cordage Jacket Colors

Singlemode - Yellow
Multimode - Orange

Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409







Fiber and UTP Hybrids

Custom configurations available



- Applications:** These cables offer the convenience of being able to install both UTP and fiber in a single pull. They can be used in all appropriate communication systems.
- Features:** Flexible jackets with ripcords strip cleanly and resist kinking
Coextruded colorstripe pairs for easy identification on UTP
- Siamese Options:** One and two UTP cables can be combined with one 2-6 fiber leg
Selected siamese/triamese products available with aramid yarn wrap for easier pulling
- Round Options:** For plenum styles, up to four UTP cables can be combined with one 2-6 fiber leg
For non-plenum styles, up to six UTP cables can be combined with one 2-6 fiber leg

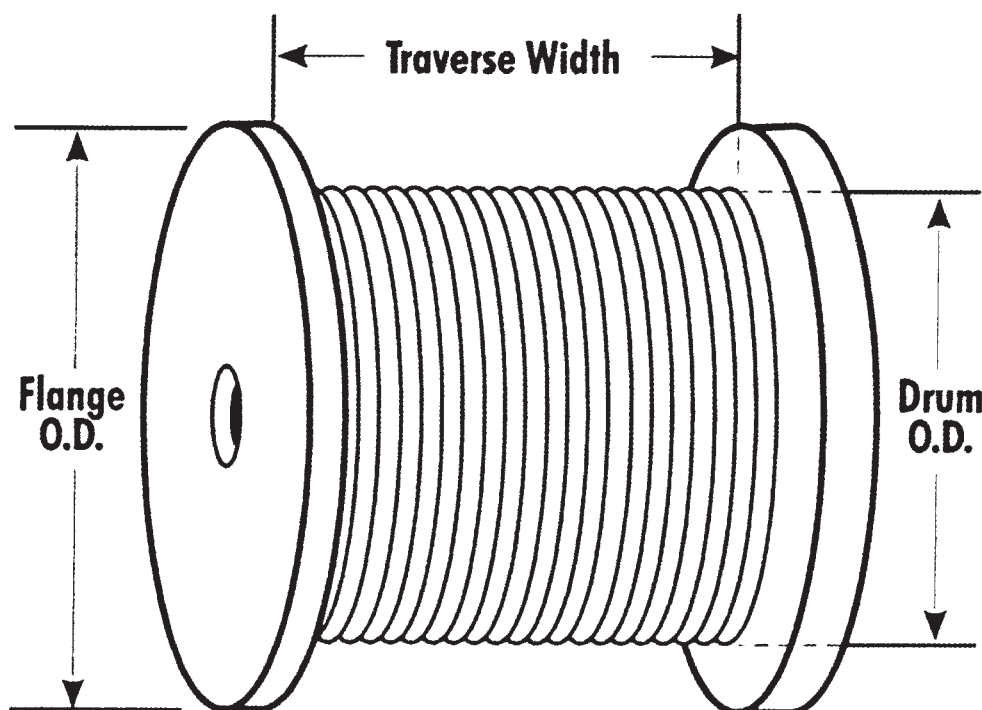
Fiber

Part Number	Fiber Component Type and Number	UTP Component Type and Number	Outer Jacket Color and Type W x H (or dia.) in/mm	Unit Weight in lbs. kft/mm 1000m
	lbs./Newtons	1000'		
0410 Triamese  UL CMP/C(UL) CMP	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 Two 4 pair with FEP insulation (see below for specifications)	Blue PVC .64/16.3 x .20/5.1	72/236
0412 Siamese  UL CMP/C(UL) CMP	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 One 4 pair with FEP insulation (see below for specifications)	Blue PVC .64/16.3 x .20/5.1	41/135
0405 Triamese  UL CMR/C(UL) CMG	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 Two 4 pair with FEP insulation (see below for specifications)	Orange PVC .42/10.7 x .20/5.1	65/213
0439 Siamese  UL CMR/C(UL) CMG	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 One 4 pair with FEP insulation (see below for specifications)	Orange PVC .42/10.7 x .20/5.1	40/131
0468 Round  UL CMP/C(UL) CMP	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 Three 4 pair with FEP insulation (see below for specifications)	Gray PVDF .52/13.2 (round)	125/410
0429 Round  UL CMP/C(UL) CMP	FDDI Two-fiber interconnect One pair of tight buffered fibers PVC buffering/PVDF inner jacket (see below for specifications) available with up to six tight-buffered fibers	Standard Category 5 Two 4 pair with FEP insulation (see below for specifications)	Blue PVDF .42/10.7 (round)	92/302

Category 5 Component	No. of Pairs	Conductor Size and Material	Insulation Type And Thickness in/mm	Nominal Capacitance	Characteristic Impedance	Maximum DCR kft/100mm	Velocity of Propagation
Plenum UTP	4	24 AWG Solid BC	FEP .007/.18	14 pF/ft	100Ω ± 15Ω	28.6Ω/9.4Ω	72%
Non-plenum UTP	4	24 AWG Solid BC	PE .008/.20	14pF/ft	100Ω ± 15Ω	28.6Ω/9.4Ω	70%

Fiber Component	Fiber Type		Min. Bend Radius		Max. Tensile Load	
	Typical Attenuation	Maximum Attenuation	Loaded in/cm	Unloaded in/cm	Short Term lbs./newtons	Long Term lbs./newtons
Plenum/Non-plenum 2 fiber interconnect	FDDI-grade 62.5/125μm graded index		2.8/7.2	1.4/3.6	270/1200	90/400
	3.0dB/km @ 850nm	3.7dB/km @ 850nm				
	0.9 db/km @ 1300nm	1.5dB/km @ 1300nm				

Specifications subject to change without notice.



Packaging and Shipping

Fiber optic cable is packaged for shipment on non-returnable wooden or plastic reels. Each package contains only one continuous length of cable. The packaging is designed so as to prevent damage to the cable during shipping and handling. Fiber cable reels are protected with a "reel wrap", the highest technology available today. This wrap is stronger, lighter and more environmentally friendly than other methods of lagging. In addition, reel wrap is simple to remove from the reel and readily disposable. All reel sizes between 35 and 78 inches will be blocked and palletized to help ensure safe arrival to the customer. Reels larger than 78 inches are placed on the rolling edge and securely fastened to the trailer during shipment.

Each reel is plainly marked to indicate the direction in which it should be rolled to prevent loosening of the cable on the reel.

Method of Shipment

CommScope's method of shipment of fiber optic cable from Claremont, North Carolina to the purchaser's site will vary depending on factors such as the size and number of cable reels, and the destination location. Shipper options include Federal Express, UPS, BAX, LTL motor freight carriers and CommScope's own fleet of trucks, "Cable Transport". Some trucks within CommScope's fleet are equipped with "Cargo Master" equipment for ease in unloading cable reels on location where no loading dock is available. These specially equipped trucks are available by request.

International Packaging

Products shipped outside the continental United States are protected with reel wrap, lagged with wood, and blocked and palletized (for reel sizes between 35 and 78 inches) or placed on the rolling edge and securely fastened to international shipping containers.

Maximum Reel Capacity Per Cable Diameter



Reel dimensions given as flange x drum x traverse

Cable length may vary with fiber type

Instructions: 1. Find your Cable Type and Outer Diameter (OD). 2. Look up OD on Chart.
3. Find length which meets or exceeds your requirements.

Outside plant loose tube cables

Cable Diameter inches/mm	Reel Size									
	36x22x30 ft/m	42x22x30 ft/m	48x22x33 ft/m	54x24x28 ft/m	60x30x32 ft/m	66x30x32 ft/m	72x36x36 ft/m	78x36x36 ft/m	84x40x40 ft/m	88x40x40 ft/m
0.30/7.6	14281/4356	24180/7375	38341/11694	41000/12496						
0.35/8.9	10492/3200	17765/5418	28169/8591	31203/9517	41000/12496					
0.36/9.1	9701/2959	16425/5010	26044/7943	28849/8799	41000/12496					
0.37/9.4	9389/2864	15896/4848	25206/7688	27921/8516	36819/11230	41000/12496				
0.49/12.4	n/a	9064/2764	14372/4383	15910/4853	20993/6403	26871/8196	34009/10373	41000/12496		
0.57/14.5	n/a	6698/2043	10621/3239	11765/3588	15514/4732	19858/6057	25132/7665	30950/9440	39187/11952	41000/12496
0.58/14.7	n/a	6469/1973	10258/3129	11362/3465	14984/4570	19179/5850	24273/7403	29892/9117	37847/11543	41000/12496
0.65/16.5	n/a	5151/1571	8157/2488	9047/2759	11930/3639	15270/4657	19127/5834	23800/7259	30134/9191	35000/10668
0.66/16.7	n/a	4996/1524	7922/2416	8775/2676	11571/3529	14311/4365	18745/5717	23085/7041	29228/8915	35000/10668
0.72/18.3	n/a	4198/1280	5656/1725	7373/2249	9723/2966	12446/3796	15751/4804	19398/5916	24560/7490	31500/9601
0.73/18.5	n/a	n/a	6475/1975	7173/2188	9459/2885	12107/3692	15323/4674	18870/5755	23892/7287	31500/9601
0.74/18.8	n/a	n/a	6302/1922	6980/2129	9205/2808	11782/3594	14911/4548	18363/5601	23250/7091	31500/9601
0.80/20.3	n/a	n/a	5392/1645	5972/1821	7976/2433	10081/3075	12759/3891	15712/4792	19893/6067	31000/9455
0.81/20.6	n/a	n/a	5259/1604	5826/1777	7682/2343	9834/3000	12446/3796	15326/4674	19405/5919	30000/9150
0.82/20.8	n/a	n/a	5132/1563	5685/1734	7496/2286	9595/2926	12114/3695	14955/4561	18935/5775	27000/8235
0.83/21.1	n/a	n/a	5009/1528	5548/1692	7317/2232	9365/2856	11853/3615	14597/4452	18481/5637	26000/7930
0.84/21.3	1454/443	2749/838	4672/1424	5380/1640	7160/2182	9531/2905	12139/3700	15361/4682	19662/5993	22425/6835
0.90/22.8	1253/382	2381/726	4054/1236	4672/1424	6218/1895	8284/2525	10552/3216	13360/4072	17105/5214	19514/5948
Tare Wt. (lb/kg)	100/45	125/57	205/93	358/163	477/217	559/254	685/311	785/356	935/425	1050/477
Lagging Wt. (lb/kg)	90/41	102/46	130/59	175/80	217/99	245/111	300/136	324/147	361/164	400/182

Indoor/outdoor and premises cables

Cable Diameter inches/mm	Reel Size						
	18x12x12 ft/m	22x12x12 ft/m	30x12x12 ft/m	35x16x18 ft/m	42x24x24 ft/m	50x24x24 ft/m	54x30x30 ft/m
0.10/2.5	11521/3511	21945/6693	28500/7930				
0.12/3.0	8001/2440	15239/4648	28500/7930				
0.15/3.8	5120/1562	9753/2975	21945/6693	28500/7930			
0.18/4.6	3556/1084	6773/2066	15239/4648	28500/7930			
0.10/2.5 x .21/5.3	4387/1338	9789/2986	16385/4997	28500/7930			
0.12/3.0 x .25/6.4	3200/976	6100/1861	14000/4267	28500/7930			
0.20/5.0	2880/878	5486/1673	12344/3764	23942/7302	28500/7930		
0.22/5.6	2380/726	4534/1383	10202/3112	19787/6035	28500/7930		
0.25/6.4	1843/562	3511/1071	7900/2410	15323/4674	25280/7710	28500/7930	
0.27/6.9	1580/482	3010/918	6773/2066	13137/4007	21674/6611	28500/7930	
0.30/7.6	1280/390	2438/743	5486/1673	10641/3246	17556/5355	28500/7930	
0.32/8.1	1125/343	2143/653	4822/1471	9352/2852	15430/4706	25074/7647	28500/7930
0.35/8.9	940/287	1791/546	4031/1229	7818/2384	12898/3934	20960/6393	28500/7930
0.37/9.4	842/257	1603/488	3607/1100	6996/2134	11541/3520	18755/5720	24045/7333
0.40/10.1	720/220	1372/418	3086/941	5741/1751	9567/2918	15601/4758	20573/6275
0.45/11.4	569/174	1084/330	2438/743	4536/1383	7559/2305	12327/3760	16255/4958
0.50/12.7	461/141	878/268	1975/602	3674/1120	6123/1868	9985/3045	13167/4016
0.55/14.0	381/116	725/221	1632/498	3037/926	5060/1543	8252/2517	10882/3319
0.60/15.2	n/a	n/a	n/a	2552/778	4252/1297	6934/2115	9000/2745
0.65/16.5	n/a	n/a	n/a	2174/663	3623/1105	5908/1802	7725/2356
0.70/17.8	n/a	n/a	n/a	1875/572	3124/953	5094/1554	6718/2049
0.75/19.1	n/a	n/a	n/a	1633/498	2721/830	4438/1354	5650/1723
0.80/20.3	n/a	n/a	n/a	1435/438	2392/730	3900/1190	4700/1434
0.85/21.6	n/a	n/a	n/a	n/a	2187/667	3455/1054	4250/1296
0.90/21.6	n/a	n/a	n/a	n/a	1951/595	3170/967	3700/1129
0.95/24.1	n/a	n/a	n/a	n/a	1751/534	2845/868	3350/1022
1.00/25.4	n/a	n/a	n/a	n/a	1580/482	2568/783	3050/930
1.05/26.7	n/a	n/a	n/a	n/a	1433/437	2329/7103	2700/824
Tare Wt. (lb/kg)	9/4	12/5	21/10	90/41	135/61	170/77	205/93

Self Supporting Fiber Feeder Cable

Span Length 350 feet
Installation Temperature 70° F
Installation Sag 5 feet
Installation Tension 285 lb.

Span Length 200 feet
Installation Temperature 70° F
Installation Sag 2 feet
Installation Tension 233 lb.

NESC Light - Rule 151

Vector Sag 8.16 feet
Horizontal Sag 8.16 feet
Vertical Sag 2.21 feet
Tension 740 lb.

NESC Light - Rule 151

Vector Sag 3.48 feet
Horizontal Sag 3.35 feet
Vertical Sag 0.94 feet
Tension 567 lb.

NESC Medium - Rule 151

Vector Sag 9.76 feet
Horizontal Sag 6.96 feet
Vertical Sag 9.89 feet
Tension 1005 lb.

NESC Medium - Rule 151

Vector Sag 4.24 feet
Horizontal Sag 3.02 feet
Vertical Sag 2.97 feet
Tension 755 lb.

NESC Heavy - Rule 151

Vector Sag 12.10 feet
Horizontal Sag 6.98 feet
Vertical Sag 9.89 feet
Tension 1434 lb.

NESC Heavy - Rule 151

Vector Sag 5.37 feet
Horizontal Sag 3.10 feet
Vertical Sag 4.39 feet
Tension 1054 lb.

Additional Sag and Tension information is available through CommScope's SpanMaster™ software, available on our website at www.commscope.com

Coaxial cables are commonly referred to with a “RG” designation. For the purpose of being consistent with corresponding specifications within SCTE IPS-SP-001 and TIA/EIA-570-A, the “Series” designation is used for relevant cables in this catalog.

Cable Construction & Descriptions

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CommScope, the world’s largest supplier of broadband cable, is a leading source for communications cable solutions around the world. The name trusted for decades of quality cable is broadening the horizons of your communications universe. CommScope’s UltraHome® residential cabling products provide the foundation to support the capabilities of today’s technologies as well as those of the future. Integrating central control devices and structured wiring schemes can create an “in-home network infrastructure”. With UltraHome, it’s possible to establish a complete signal distribution system that collects and distributes electronic signals from computer networks, telephones, internet lines, faxes, modems, cable TV, video monitors and security systems. For more information, call 1-800-544-1948 or visit us at www.commscope.com.

UH58360

- Home Network
- Telephone
- Fax
- Internet Access
- Video Distribution

UH58760

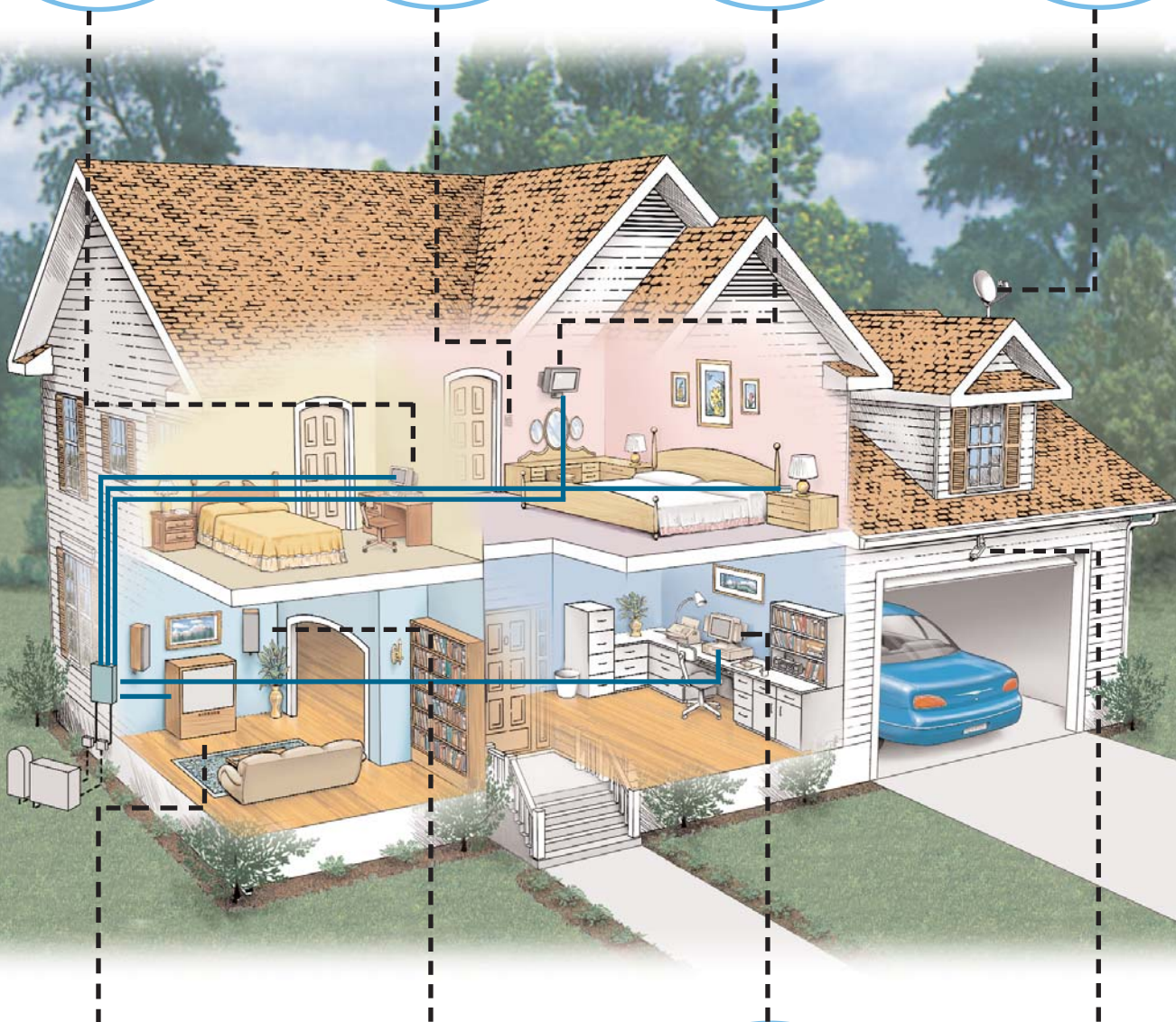
- Home Controls,
- HVAC, Lighting
- Security
- Internet

UH58120

- Cable TV
- Satellite
- Pay-Per-View

5730

- Satellite Delivery

**UH58380**

- Cable TV
- Satellite
- Telephone
- Video Distribution
- Optional fiber for future proofing

UH58820

- Audio for home theater systems

UH58380

- Home Network
- Telephone/Fax
- Internet Access
- Video Distribution
- Optional fiber for future proofing

5554

- Security Camera Pan & Tilt

Conductors in coaxial cable are either solid wire. Solid conductors are described by their diameter and material (i.e. 18 AWG Solid TC).

Center Conductor

BC - Bare Copper

CCS - Copper Covered Steel

Most CommScope coaxial cables have foamed (or cellular) dielectrics for better velocity of propagation characteristics. Different materials are used to meet electrical and fire-safety performance.

Dielectric

Foam PE - Foamed Polyethylene

Foam FEP - Foamed Fluorinated Ethylene Propylene (generic or Teflon® brand)

Coaxial shields (also called the outer conductor) come in several varieties. Two types of coverage are: **Foil**, where aluminum is bonded to both sides of a polypropylene or polyester tape to provide 100% coverage and **Braid** where flexible wire is woven around the dielectric. Braid coverage designation is given as a percentage followed by a two letter code representing the material of the braid (i.e. 96% BC braid).

Shields

AL - Aluminum braid

BC - Bare Copper braid

Jacket material may vary depending on application. Plenum-rated cables provide superior fire safety, while flame-retardant PVC are used in riser, general purpose and residential situations. Outdoor cables (especially those meant for burial) are usually sheathed in polyethylene.

Jackets

K - Kynar™ Polyvinylidene Fluoride (PVDF - used in plenum cables)

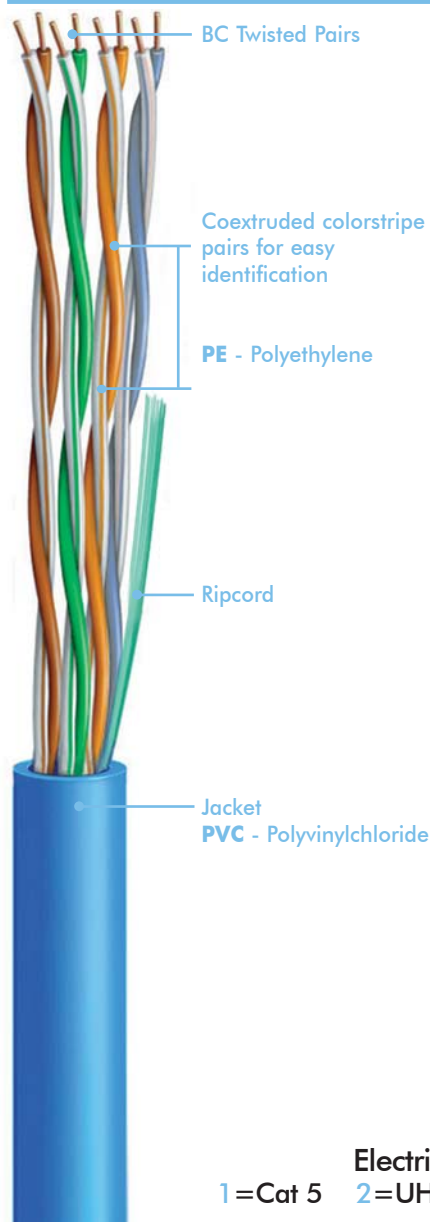
V - CommFlex, our proprietary jacketing compound (used in plenum cables)

PE - Polyethylene

PVC - Polyvinylchloride

Teflon is a registered trademark of E.I. Dupont de Nemours and Co.





Established by the telecommunications industry association and first published in ANSI/EIA/TIA-568 in 1991, the Category 5 designation applies to 100Ω unshielded twisted pair cables and associated connecting hardware whose transmission characteristics are specified up to 100MHz. Available from one to twenty-five pairs, typical applications range from voice to 155Mb/s, Fast Ethernet, ATM, TPDDI, CDDI, TP-PMD, 100 Base T.

UH 58760 Category 5e Cable

Often referred to as addendum 5, Category 5e was developed for simultaneous bi-directional transmission over 4-pairs. Improvements to Category 5 were made and additional electrical requirements such as power sum NEXT, equal level far-end crosstalk, power sum equal level far-end crosstalk, and return loss were added to create the 5e specification. Typical applications include those of Category 5 and full duplex encoding schemes such as gigabit Ethernet (1000 Base T).

UH58780 Category 5e "PLUS"

First released in 1996, the Ultra II family was designed with the future in mind. A 350MHz Enhanced Category 5 UTP cable that provides guaranteed "headroom" over today's current 5e standards. Ultra II incorporated superior isolation and return loss with low insertion loss, <15ns in Delay Skew, and ISO/IEC 11801 input impedance compliant.

UH58800 Category 6 (proposed)

Introduced in 1998, UltraMedia is designed to exceed all Category 6 requirements for high-speed, full-duplex, parallel transmission protocols. The revolutionary patented Isolator™ maximizes pair separation and minimizes pair motion resulting in superior NEXT, ELFEXT, and RL performance to 400MHz. Typical applications include high-speed digital voice, video and data, such as 3D imaging, broadband video, gigabit Ethernet, and 155/622Mb/s ATM.

Electrical Performance of CommScope Twisted Pair Cable

1=Cat 5 2=UH58760 (Cat 5e) 3=UH58780 (Cat 5e+) 4=UH58800 (Cat 6)

Frequency MHz	Attenuation-max. dB/100m				Near End Cross Talk (NEXT)-min, dB				Attenuation to Crosstalk (ACR)-min, dB				Power Sum NEXT-min. dB			Power Sum ACR-min. dB			ELFEXT-min. dB			Power Sum ELFEXT dB			SRL				RL			
	1	2	3	4	1	2	3	4	1	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	1	2	3	4	1	2	3	4
0.772	1.8	1.8	1.8	1.6	64	67	71	76	62.2	65.2	69.2	74.4	64	68	74	62.2	66.2	72	66	69	72.2	63	66	68	23	19.4	23	23				
1	2.0	2.0	2.0	1.9	62.3	65.3	69.3	74.3	60.3	63.3	67.3	72.3	62.3	66.3	72.3	60.3	64.3	70	63.8	66.8	70	60.8	63.8	65.8	23	20	23	23				
4	4.1	4.1	4.0	3.7	53.3	56.3	60.3	65.3	49.2	52.2	56.2	61.6	53.3	57.3	63.3	49.2	53.2	60	51.7	54.7	58	48.7	51.7	53.7	23	23	23	24				
8	5.8	5.8	5.7	5.3	48.8	51.8	55.8	60.8	43	46	50.1	55.5	48.8	52.8	58.8	43	47.1	53	45.7	48.7	51.9	42.7	45.7	47.7	23	24.5	24.5	25				
10	6.5	6.5	6.5	5.9	47.3	50.3	54.3	59.3	40.8	43.8	47.9	53.4	47.3	51.3	57.3	40.8	44.9	51	43.8	46.8	50	40.8	43.8	45.8	23	25	25	25				
16	8.2	8.2	8.2	7.6	44.3	47.3	51.3	56.3	36	39	43.1	48.7	44.3	48.3	54.3	36	40.1	47	39.7	42.7	45.9	36.7	39.7	41.7	23	25	25	25				
20	9.3	9.3	9.2	8.5	42.8	45.8	49.8	54.8	33.5	36.5	40.6	46.3	42.8	46.8	52.8	33.5	37.6	44	37.7	40.7	44	34.7	37.7	39.7	23	25	25	25				
25	10.4	10.4	10.3	9.5	41.3	44.3	48.3	53.3	30.9	33.9	38.1	41.2	41.3	45.3	51.3	30.9	35.1	42	35.8	38.8	42	32.8	35.8	37.8	22	24.3	24.3	24				
31.25	11.7	11.7	11.5	10.7	39.9	42.9	46.9	51.9	28.2	31.2	35.4	31.9	39.9	43.9	49.9	28.2	32.4	39	33.9	36.9	40.1	30.9	33.9	35.9	21.1	23.6	23.6	24				
62.5	17.0	17.0	16.4	15.5	35.4	38.4	42.4	47.4	18.4	21.4	25.9	30	35.4	39.4	45.4	18.4	22.9	30	27.8	30.8	34.1	24.8	27.8	29.8	18.1	21.5	23	23				
100	22.0	22.0	21.0	19.9	32.3	35.3	39.3	44.3	10.3	13.3	18.3	24.4	32.3	36.3	42.3	10.3	15.3	22	23.8	26.8	30	20.8	23.8	25.8	16	20.1	23	23				
155			26.4	25.3			36.5	41.5			10.1	16.2		33.5	39.5		7.1	14		22.9	26.2		19.9	21.9				20	20			
200			30.2	29.1			34.8	39.8			4.6	10.7		31.8	37.8		1.6	8		20.7	24		17.7	19.7				20	20			
350			40.7	40			31.2	36.2			-9.5	-3.8		28.2	34.2		-12.5	-7		15.9	19.1		12.9	14.9				16.3	17			
400				43.2			35.3				-7.9			33.3			-11			18			13.7						16			

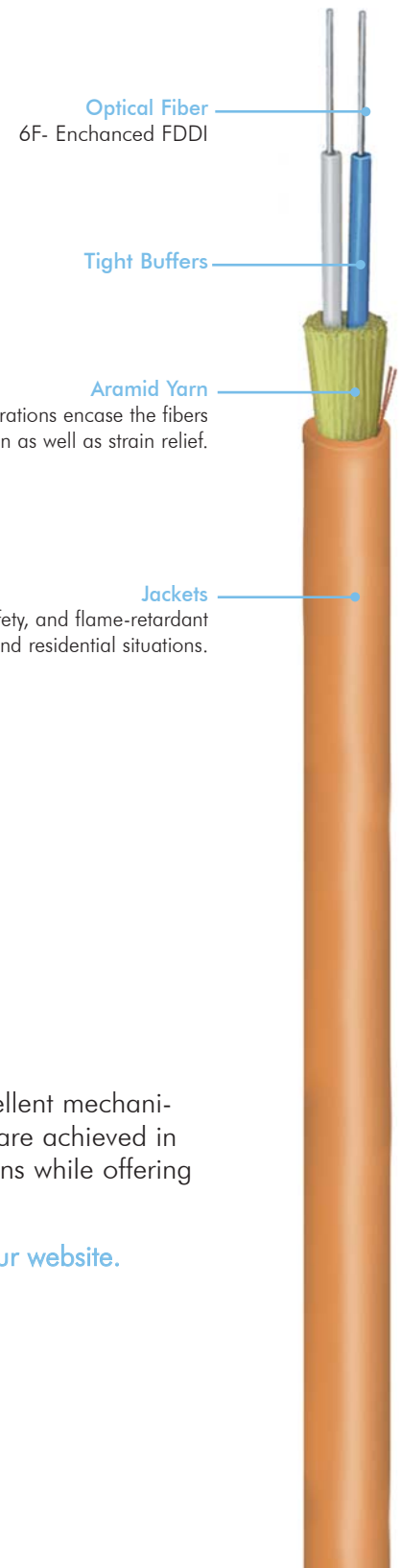
Tight-buffered cordage protects the fiber with stranded aramid fibers. Loose-tube and central-tube configurations encase the fibers in a rugged buffering tube that offers mechanical protection as well as strain relief.

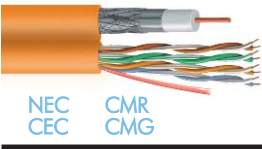
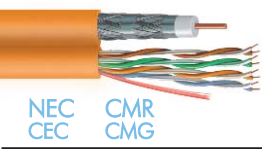
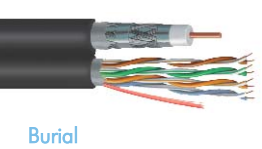
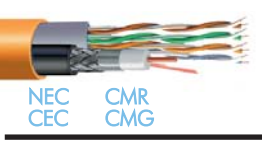
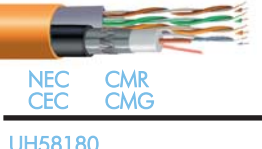


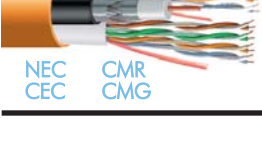
Jacket material varies depending on how the cable is used. Plenum-rated jackets provide superior fire safety, and flame-retardant PVC is used in riser, general purpose and residential situations.

Riser Rated Premise Distribution Fiber

CommScope premise cables were engineered with two goals in mind- excellent mechanical/optical performance couples with superior fire safety ratings. These goals are achieved in a cable that meets all critical NEC requirements for riser or plenum applications while offering unique resistance to installation and termination stresses.

Detailed product specification sheets are available at the download area of our website.













Part Number	Component Cables	Descriptions	Cable Jacket Type Nominal OD in / mm
UH58100  NEC CEC CMR CMG	One Dual Shield Series 6 coaxial cable One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation Siamese Design	Flame-retardant PVC 0.512/13 by 0.272/6.9
UH58120  NEC CEC CMR CMG	One Quad Shield Series 6 coaxial cable One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation Siamese Design	Flame-retardant PVC 0.532/13 by 0.300/7.6
UH58130F  Burial	One Quad Shield Series 6 coaxial cable One pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation Siamese Design	Flooded PE 0.532/13 by 0.300/7.6
UH58140  NEC CEC CMR CMG	One Dual Shield Series 6 coaxial cable One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .518/13.2
UH58160  NEC CEC CMR CMG	One Tri Shield Series 6 coaxial cable One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .518/13.2
UH58180  NEC CEC CMR CMG	One Quad Shield Series 6 coaxial cable One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .518/13.2
UH58200  NEC CEC CMR CMG	One Dual Shield Series 6 coaxial cable Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .526/13.4
UH58220  NEC CEC CMR CMG	One Tri Shield Series 6 coaxial cable Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .526/13.4





Part Number	Component Cables	Descriptions	Cable Jacket Type Nominal OD in / mm
UH58240 NEC CEC CMR CMG	One Quad Shield Series 6 coaxial cable Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .526/13.4
UH58260 NEC CEC CMR CMG	Two Dual Shield Series 6 coaxial cables One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .610/15.4
UH58280 NEC CEC CMR CMG	Two Tri Shield Series 6 coaxial cables One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .610/15.4
UH58300 NEC CEC CMR CMG	Two Quad Shield Series 6 coaxial cables One 4 pair Cat 5e cable	CATV/DSS quality 18 AWG solid bare copper center conductor foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .610/15.4
UH58320 NEC CEC CMR CMG	Two Dual Shield Series 6 coaxial cables Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductors foil/60% braid Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .650/16.4
UH58340 NEC CEC CMR CMG	Two Tri Shield Series 6 coaxial cables Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductors foil/60% braid/foil Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .650/16.4
UH58360 NEC CEC CMR CMG	Two Quad Shield Series 6 coaxial cables Two 4 pair Cat 5e cables	CATV/DSS quality 18 AWG solid bare copper center conductors foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation	Flame-retardant PVC .650/16.4
UH58380 NEC CEC CMR CMG	Two Quad Shield Series 6 coaxial cables Two 4 pair Cat 5e cables One 2-fiber interconnect cable	CATV/DSS quality 18 AWG solid bare copper center conductors foil/60% braid/foil/40% braid shields Voice/Data Grade 24 AWG solid bare copper conductors/polyethylene insulation Enhanced FDDI-grade fiber 62.5/125µm tight buffered fiber	Flame-retardant PVC .670/16.9

Residential

Residential


Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Dimensions in / mm.	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
									MHz	dB/100'	dB/100m
5788 Series 6 	2-18 AWG Solid CCS 28.6Ω/93.8Ω Ground Wire 17 AWG Solid CCS	Foam PE .180/4.57	AL foil, 60% AL braid 9.0Ω/29.5Ω	Flame- retardant PVC .030/.76	.272/6.9 by .730/18.5 wide	16.2 53.1	82%	75Ω	1	0.25	0.82
									10	0.81	2.66
									50	1.79	5.87
									100	2.05	6.72
									200	2.83	9.28
									400	4.05	13.28
									700	5.60	18.37
									900	6.23	20.43
									1000	6.59	21.62
									1200	7.50	24.60
									1450	8.04	26.37
									1800	8.80	28.86
									2200	9.70	31.81
									NEC CEC	CM CMH	
5916R Series 11 	14 AWG Solid CCS 15.0Ω/49.2Ω	Foam PE .280/7.11	AL foil, 60% AL braid 7.1Ω/23.3Ω	Flame- retardant PVC .045/1.1	.405/10.3	16.2 53.1	82%	75Ω	1	0.22	0.72
									10	0.49	1.61
									50	0.98	3.21
									100	1.29	4.23
									200	1.84	6.04
									400	2.68	8.79
									700	3.67	12.04
									900	4.25	13.94
									1000	4.52	14.83
									1200	4.91	16.10
									1450	5.39	17.68
									1800	6.01	19.71
									2200	6.64	21.78
									NEC CEC	CMR CMG	

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Dimensions in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5553 Series 59  NEC CEC CM CMH	20 AWG Solid BC 10.5Ω/34.5Ω	Foam PE .144/3.66	95% BC Braid 2.7Ω/8.9Ω	Flame- retardant PVC .034/.86	.242/6.1	16.2	53.2	82%	75Ω	1 10 100 400	0.20 0.82 2.62 5.45	0.65 2.69 8.59 17.88
5554 Series 59  NEC CL2	20 AWG Solid BC 10.5Ω/34.5Ω and 18 AWG Pair (7x26) BC	Foam PE .146/3.71	95% BC Braid 2.7Ω/8.9Ω	Flame- retardant PVC .032/.81	.242/6.15 by .484/12.3	16.2	53.2	82%	75Ω	1 10 100 400	0.22 0.82 2.62 5.45	0.65 2.69 8.59 17.88
5700 Series 6  NEC CEC CM CMG	18 AWG Solid BC 6.4Ω/21.3Ω	Foam PE .180/4.57	95% BC Braid 2.0Ω/6.6Ω	Flame- retardant PVC .035/.89	.272/6.9	16.2	53.2	82%	75Ω	1 10 100 400	0.19 0.65 2.16 4.55	0.62 2.14 7.09 14.93
5654 Series 6  NEC CEC CM CMG	18 AWG Solid BC 6.4Ω/21.3Ω and 18 AWG Pair (7x.0159) BC	Foam PE .180/4.57	95% BC Braid 2.0Ω/6.6Ω	Flame- retardant PVC .035/.89	.272/6.9 by .514/13.06	16.2	53.2	82%	75Ω	1 10 100 400	0.19 0.65 2.16 4.55	0.62 2.14 7.09 14.93
2037V Series 59  NEC CEC CMP CMP	20 AWG Solid BC 10.5Ω/34.5Ω	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	CommFlex(V) .016/.41	.193/4.9	16.0	52.5	84%	75Ω	1 10 100 400	0.24 0.85 2.92 6.27	0.79 2.79 9.25 20.57
2054K Series 59  NEC CEC CMP CMP	20 AWG Solid BC 10.5Ω/34.5Ω and 18 AWG Pair (7x26) BC	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	PVDF(K) .015/.38	.193/4.9 by .386/9.8	16.0	52.5	84%	75Ω	1 10 100 400	0.24 0.85 2.92 6.27	0.79 2.79 9.25 20.57
2039V Series 59  NEC CEC CMP CMP	20 AWG Solid CCS 44.7Ω/147Ω	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	CommFlex(V) .016/.41	.193/4.9	16.0	52.5	84%	75Ω	1 10 100 400	0.24 0.85 2.92 6.27	0.79 2.79 9.25 20.57
2277V Series 6  NEC CEC CMP CMP	18 AWG Solid BC 6.4Ω/21.3Ω	Foam FEP .170/4.32	95% BC Braid 2.0Ω/6.6Ω	CommFlex(V) .016/.41	.237/6.0	16.0	52.5	84%	75Ω	1 10 100 400	0.21 0.65 2.04 4.46	0.69 2.13 6.69 14.63

Residential	UTP Component	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Dimensions in / mm.	Nominal Capacitance nF/100m	Nominal Impedance	Maximum Direct Current Resistance	Near End Crosstalk @ 100 MHz dB/100 ft	Jacket Color
	 UH58760 Cat 5e NEC CEC CMR CMG	4	24 AWG Solid BC	PE .006/.15	Flame-retardant PVC .022/.06	.195/4.9	4.6	100Ω ± 15Ω	28.6Ω/kft 9.4Ω/100m	35 min.	Blue White Grey Yellow Red
	 UH58770 Cat 5e Siamese NEC CEC CMR CMG	8	24 AWG Solid BC	PE .006/.15	Flame-retardant PVC .022/.06	.200/5.1 by .403/10.2	4.6	100Ω ± 15Ω	28.6Ω/kft 9.4Ω/100m	35 min.	
	 UH58780 Cat 5e Plus NEC CEC CMR CMG	4	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .022/0.6	.195/4.9	4.6	100Ω ± 15Ω	28.6Ω/kft 9.4Ω/100m	39 min.	
	 UH58800 Cat 6 NEC CEC CMR CMG	4	23 AWG Solid BC	PE .008/.20	Flame-retardant PVC .020/.51	.240/6.1	4.6	100Ω ± 15Ω	20.3Ω/kft 6.7Ω/100m	44 min.	

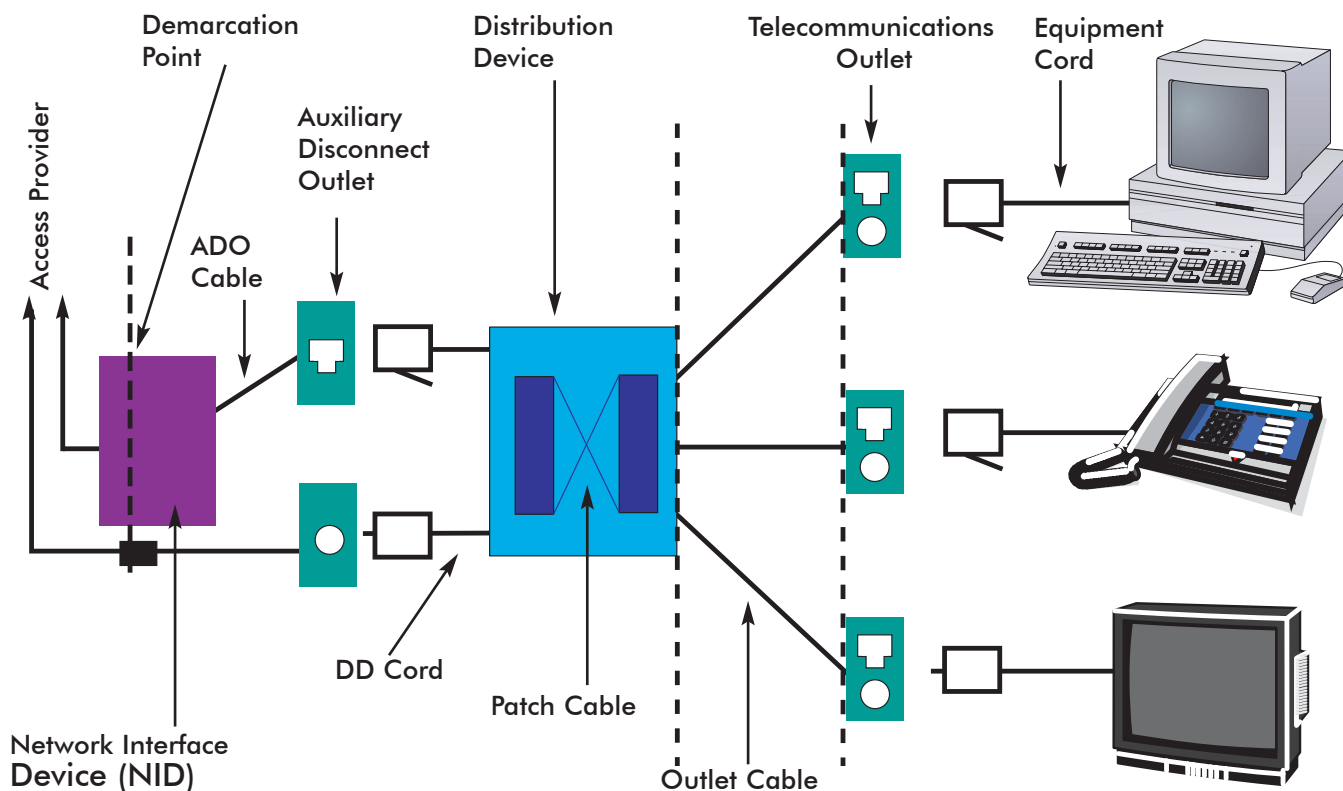
Part Number Safety Rating	No. of Conductors	Conductor Size & Type Nom DCR in / mm	Dielectric Type Nom OD	Jacket Type & Thickness	Diameter over Jacket
UH58820  NEC CM	2	16 AWG 4.8Ω/15.7Ω	Flame- retardant PVC .086	FR-PVC .030	.201
UH58840  NEC CM	4	16 AWG 4.8Ω/15.7Ω	Flame- retardant PVC .086	FR-PVC .030	.291
UH58860  NEC CM	2	14 AWG 3.0Ω/9.8Ω	Flame- retardant PVC .086	FR-PVC .030	.215
UH58880  NEC CM	4	14 AWG 3.0Ω/9.8Ω	Flame- retardant PVC .086	FR-PVC .030	.305

UltraHome® Fiber Optic Products

Fiber Component	Fiber Type	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
R-002-IC-6F-FSDOR  NEC OFNR	Enhanced FDDI-grade 62.5/125μm tight buffered fiber	.14/36	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

*For optical performance specifications, please refer to CommScope's Fiber Optic Catalog.

Typical Cabling System Components Per TIA/EIA 570-A for a Single Residential Unit



UltraHome® Color Options, Packaging, Purchasing and Shipping Terms & Conditions



Product Part No.	Colors									Packaging			Lengths		Wt/kft
	Black	White	Cream	Blue	Grey	Yellow	Orange	Purple	Red	Box	RIB	Reel	500ft.	1000ft.	
UH58100				x			x					x	x	x	55
UH58120				x			x					x	x	x	59
UH58130F	x											x		x	60
UH58140				x			x					x	x	x	75
UH58160				x			x					x	x	x	76
UH58180				x			x					x	x	x	81
UH58200				x			x					x	x	x	94
UH58220				x			x					x	x	x	97
UH58240				x			x					x	x	x	100
UH58260				x			x					x	x	x	117
UH58280				x			x					x	x	x	127
UH58300				x			x					x	x	x	137
UH58320				x			x					x	x	x	137
UH58340				x			x					x	x	x	144
UH58360				x			x					x	x	x	152
UH58380				x			x					x	x	x	163
5729	x	x			x					x		x	x	x	32
5730	x	x			x							x	x	x	34
5786	x	x			x							x	x	x	72
5783	x	x										x	x	x	30
5784	x	x										x	x	x	56
5781	x	x								x		x	x	x	36
5782	x	x										x	x	x	67
5731	x	x										x	x	x	45
5788	x	x										x	x	x	81
5916R	x	x								x		x	x	x	78
5553	x	x			x					x		x	x	x	39
5554	x	x										x	x	x	58
5700	x	x								x		x	x	x	42
5654	x	x								x		x	x	x	30
2037V	x	x								x		x	x	x	30
2054K			x									x	x	x	47
2277V	x	x										x	x	x	43
2039V	x	x								x		x	x	x	30
UH58760		x		x	x	x			x	x	x	x		x	27
UH58770		x		x	x	x			x			x		x	55
UH58780		x		x	x	x			x		x	x		x	27
UH58800		x		x	x	x			x		x	x		x	27
UH58820						x		x		x		x	x	x	30
UH58840						x		x		x		x	x	x	57
UH58860										x		x	x	x	37
UH58880										x		x	x	x	72
R-002-IC-6F-FSDOR							x					x		x	9

Residential

- Minimum order of \$1,000.
- Shipments of \$5,000 or more are f.o.b. factory, freight allowed if destination is within the continental United States.
- Shipments of less than \$5,000 are f.o.b. factory.
- Standard lengths are 1,000 feet (304.8 meters) plus or minus 10% for reels and CommPak boxes. Standard length per coil varies by product.
- Not more than 5% of each shipment shall be other than standard lengths, with no lengths shorter than 500 feet (152 meters) on 1,000 foot (304.8 meters) reels. Orders for custom print may receive lengths down to 300 feet.
- Method of shipment at discretion of shipper.
- Inspection and final acceptance shall be made at factory prior to shipment.

On approved credit, net 30 days from date of invoice; 1.5% finance charge equivalent to 18% per annum will be added after due date. All orders subject to acceptance at factory and will be billed at price in effect at time of shipment. Prices, discounts, terms conditions and specifications are subject to change without notice.

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The telephony industry has experienced a radical change in the volume and speed of the communications it delivers. The last decade has seen the rise of cellular phones, dedicated data lines, wide-area networks and synchronous digital transmission standards. Phone companies are expected to deliver an ever-increasing range of services with greater speed and reliability than ever before. CommScope is a leading manufacturer of high-speed, high-bandwidth coaxial, fiber, and twisted pair cables for the transmission of voice, data, video and other telecommunications applications. CommScope manufactures DS 3/4 coaxial products used in central offices and data centers that meet and exceed Telcordia (Bellcore) standards. From Local Area Network, to Fiber Optic, to coaxial Trunk & Distribution and Drop cable - CommScope products are known in the industry for superior quality and excellent customer service before and after the sale. Since CommScope offers a full line of coaxial and fiber optic cables, we are strategically positioned as a single source cable supplier to a variety of markets. For more information on CommScope cables, call customer service at 800-544-1948.

DS-3/DS-4 Network Hierarchy

location of cable types within the network

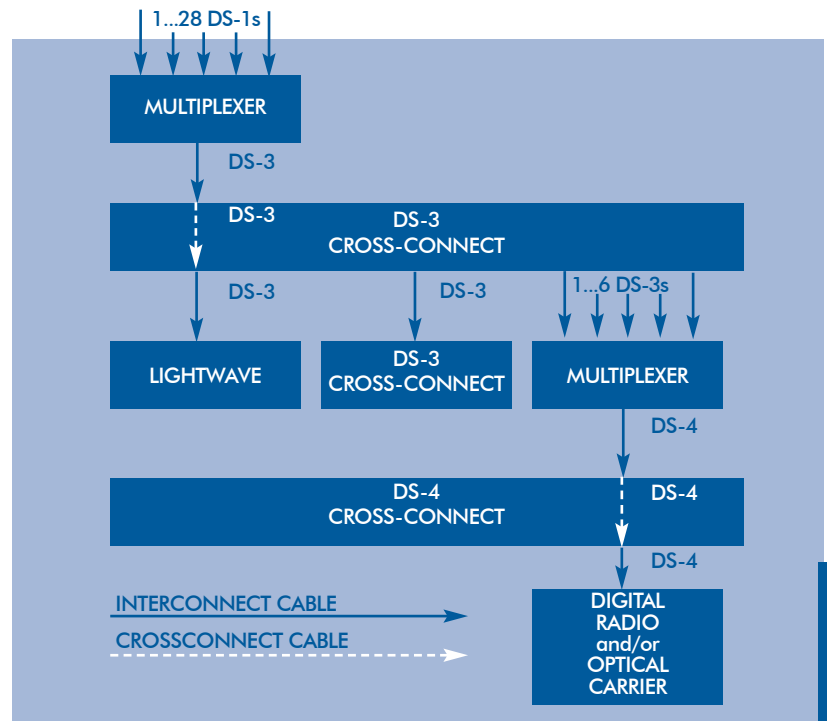
DS-3 and DS-4 telephony cables are used to interconnect transmission equipment with digital cross-connects (DSXs).

This diagram shows the location of interconnect and cross-connect cables within a typical telephony office.

Interconnect coaxial cables are used to connect different devices within the central office. Depending on the coax cable and the signal rate, maximum cabling distances may run from as long as 450 ft/137 meters to as short as 90 ft/27 meters.

Cross-Connect coaxial cables are used to manually connect the circuits within a DSX. Generally smaller and more flexible than their interconnect counterparts, they are designed to work over much shorter runs with maximum cabling distances ranging from 43 ft/13 meters to 8 ft/2.4 meters.

Fiber optic cables are gaining acceptance for use within the central office. While they generally offer higher performance than coaxial cables in both interconnect and cross-connect applications, there are some tradeoffs in cost in upgrading, such as the installation of required electro-optic devices.



DS-3/DS-4 Fire Safety Hierarchy

cable fire ratings and their physical locations



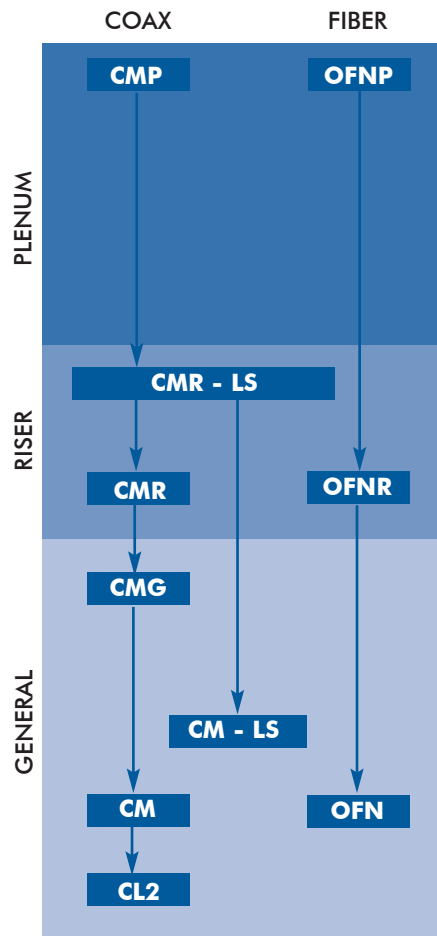
As well as being manufactured to strict quality and performance standards, CommScope cables are designed to meet or exceed safety standards as set forth in the National Electric Code (NEC) and Canadian Electrical Code (CEC) for their intended applications. Use of special jacketing and dielectric materials helps maintain superior performance and handling characteristics with no loss of safety.

PLENUM-rated cables comply with the strictest NEC/CEC standards, passing UL-910 testing for flame-propagation and smoke density. They are designed for use in plenums, ducts and other environmental air handling spaces.

RISER/LOW SMOKE-rated cables are used in vertical shafts that penetrate more than one floor AND use special zero-halogen polymers in their jackets so as not to emit toxic smoke during a fire.

RISER-rated cables are used in vertical shafts that penetrate more than one floor. They have passed UL-1666 testing for flame-propagation in vertical spaces.

GENERAL PURPOSE-rated cables may be used in locations other than plenums or risers. They pass certain UL vertical tray flame tests. Cables with a CMG rating pass a more stringent vertical tray flame test than those with a CM or CL2 rating.



In the NEC/CEC hierarchy, a cable with a higher fire rating (i.e. cable A) may be substituted for one with a lower rating (i.e. cable B).



IN NO CASE MAY A LOWER RATED CABLE BE SUBSTITUTED FOR A HIGHER ONE.

Maximum DS-3/DS-4 Cabling Distances for interconnect and cross-connect cables



Interconnect cables

CommScope telephony cables have been designed to meet both the requirements of small size and clear transmission. However, smaller cable diameters generally have higher attenuation values, resulting in shorter run distances. This chart gives typical maximum run distances at popular signal speeds for each of our interconnect cables. Your exact cabling distance may vary depending on the transmission loss budget for your network.

CommScope Cable Series	Signal Rates				
	DS-3 44.736 Mb/s	OC-1 51.840 Mb/s	DS-4NA (CEPT-4) 139.264 Mb/s	OC-3 155.520 Mb/s	DS-4 274.176 Mb/s
734 Series	450 ft • 137m	420 ft • 128m	250 ft • 76m	240 ft • 73m	180 ft • 55m
720 Series	255 ft • 78m	230 ft • 70m	140 ft • 42m	130 ft • 40m	100 ft • 30m
735 Series	230 ft • 70m	210 ft • 64m	125 ft • 38m	120 ft • 37m	90 ft • 27m

Telco

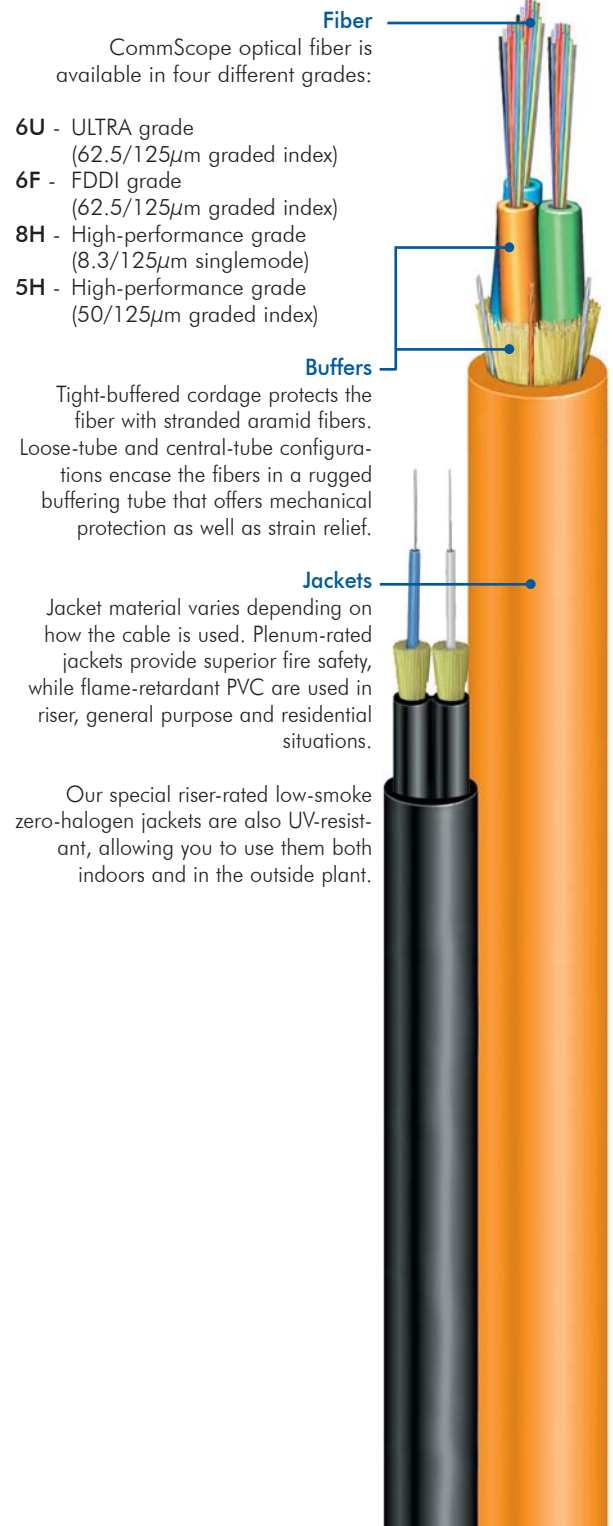
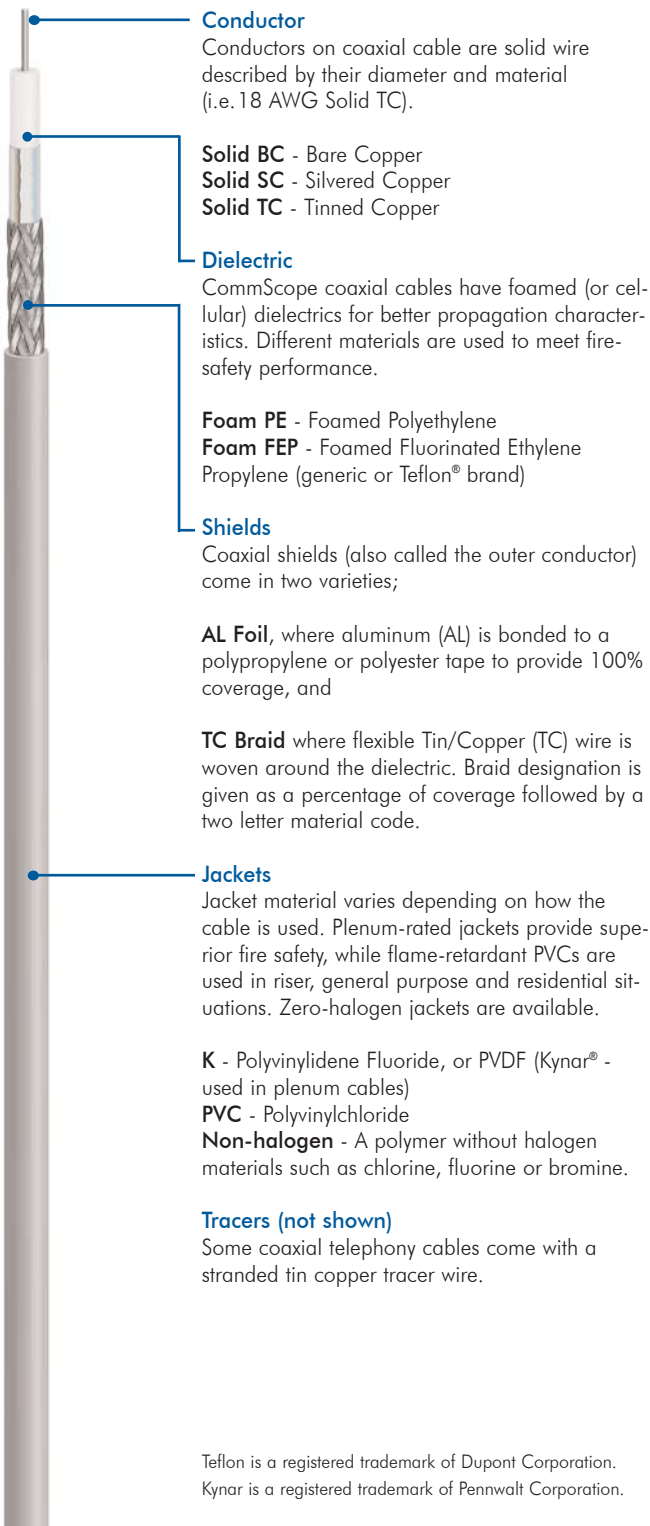
Cross-connect cables

CommScope has designed these specifically for manual digital cross-connect (DSX) applications. The same trade-offs of size vs. attenuation apply. Your exact cabling distance may vary depending on the transmission loss budget for your network.

CommScope Cable Series	Signal Rates				
	DS-3 44.736 Mb/s	OC-1 51.840 Mb/s	DS-4NA (CEPT-4) 139.264 Mb/s	OC-3 155.520 Mb/s	DS-4 274.176 Mb/s
734 Series	43 ft • 13m	40 ft • 12m	24 ft • 7m	22 ft • 6m	17 ft • 5m
720 Series	25 ft • 8m	23 ft • 7m	14 ft • 4m	13 ft • 4m	9 ft • 3m
735 Series	21 ft • 6m	20 ft • 6m	13 ft • 4m	11 ft • 3m	8 ft • 2m

Coaxial and Fiber Cable Construction

components and abbreviation key



735 Series DS-3/4 Plenum Interconnect






Small diameters and flexible construction save space and aid installation

Meets NEC/CEC CMP plenum safety requirements

Each reel tested to assure performance

Multiconductor versions have individually-numbered legs for easy identification

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
73501P  NEC CMP CEC CMP	26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .013/.33	Gray .127/3.22	17.2	56.4	78%	75Ω	17/8	1	0.55	1.80
											CEPT1	0.56	1.84
73503P  NEC CMP CEC CMP	Three (3) 26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .022/.56 Bundled Jacket is PVC .015/.40	Gray .304/7.72	17.2	56.4	78%	75Ω	62/28	5	1.10	3.61
											10	1.60	5.23
											CEPT3	2.40	7.87
											DS3	2.70	8.86
											STS1	2.80	9.18
											50	3.70	12.14
											CEPT4	4.60	15.09
											STS3	4.80	15.74
											100	5.40	17.71
											DS4	6.20	20.33
73506P  NEC CMP CEC CMP	Six (6) 26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .025/.64 Bundled Jacket is PVC .016/.40	Gray .440/11.2	17.2	56.4	78%	75Ω	123/56	200	7.70	25.26

Standard packaging is 1000 ft (±5%) reels

735 Series DS-3/4 Plenum Cross-Connect










Small diameters and flexible construction save space and aid installation

Meets NEC/CEC plenum safety requirements

Each reel tested to assure performance

Tracer leads help quickly identify DSX circuits

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
 735T1P NEC CMP CEC CMP	26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .013/.33	Gray .127/3.22 by .187/4.75	17.2	56.4	78%	75Ω	21/10	1	0.55	1.80
											CEPT1	0.56	1.84
 73502P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .284/7.30	17.2	56.4	78%	75Ω	44/20	CEPT2	1.00	3.28
											5	1.10	3.61
 735T2P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .364/9.30	17.2	56.4	78%	75Ω	21/10	10	1.60	5.23
											CEPT3	2.40	7.87
 73502P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .284/7.30	17.2	56.4	78%	75Ω	44/20	DS3	2.70	8.86
											STS1	2.80	9.18
 735T2P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .364/9.30	17.2	56.4	78%	75Ω	21/10	50	3.70	12.14
											CEPT4	4.60	15.09
 73502P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .284/7.30	17.2	56.4	78%	75Ω	44/20	STS3	4.80	15.74
											100	5.40	17.71
 735T2P NEC CMP CEC CMP	Two (2) 26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam FEP .077/1.96	AL Foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Kynar .017/.43 Bundled Jacket is PVC .015/.40	Gray .158/4.10 by .364/9.30	17.2	56.4	78%	75Ω	21/10	DS4	6.20	20.33
											200	7.70	25.26

Standard packaging is 1000 ft (±5%) reels

735 Series DS-3/4 Non-Plenum Interconnect











Lucent 735A/1735A Series Equivalent

Small diameters and flexible construction save space and aid installation

Meets Telcordia GR-139-CORE, NEC/CEC CMR riser safety requirements

Each reel tested to assure performance

Multiconductor versions have individually-numbered legs for easy identification

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
73501  NEC CMR CEC CMR	26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .013/.33	Gray .127/3.23	17.5	57.4	78%	75Ω	14/6	1	0.50	1.64
											CEPT1	0.51	1.67
											CEPT2	1.00	3.28
											5	1.08	3.54
											10	1.49	4.89
											CEPT3	1.94	6.36
											DS3	2.22	7.28
											STS1	2.39	7.84
											50	3.35	10.99
											CEPT4	3.95	12.96
											STS3	4.18	13.71
											100	4.75	15.58
											DS4	5.58	18.31
											200	6.79	22.28
73503  NEC CMR CEC CMR	Three (3) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .325/8.26	17.5	57.4	78%	75Ω	56/25			
73506  NEC CMR CEC CMR	Six (6) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .424/10.8	17.5	57.4	78%	75Ω	104/47			
73508  NEC CMR CEC CMR	Eight (8) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .514/13.1	17.5	57.4	78%	75Ω	132/60			
73509  NEC CMR CEC CMR	Nine (9) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .534/13.6	17.5	57.4	78%	75Ω	149/68			
73512  NEC CMR CEC CMR	Twelve (12) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .604/15.4	17.5	57.4	78%	75Ω	194/88			
73516  NEC CMR CEC CMR	Sixteen (16) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .725/18.5	17.5	57.4	78%	75Ω	262/119			
73524  NEC CMR CEC CMR	Twenty four (24) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .022/.56	Gray .850/21.6	17.5	57.4	78%	75Ω	382/173			

Standard packaging is 1000 ft (±5%) reels

735 Series DS-3/4 Non-Plenum Cross-Connect



Lucent 735A/1735A Series Equivalent








Small diameters and flexible construction save space and aid installation

Meets Telcordia GR-139-CORE, NEC/CEC CMR safety requirements

Each reel tested to assure performance

Multiconductor versions have individually-numbered legs for easy identification

Tracer leads help quickly identify DSX circuits

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
735T1  NEC CMR CEC CMR	26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .013/.33	Gray .127/3.23 by .222/5.64	17.5	57.4	78%	75Ω	17/8	1	0.50	1.64
											CEPT1	0.51	1.67
73502  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .028/.71	Gray .186/4.72 by .313/7.95	17.5	57.4	78%	75Ω	37/17	5	1.08	3.28
											CEPT2	1.00	3.28
735T2  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .028/.71	Gray .186/4.72 by .400/10.2	17.5	57.4	78%	75Ω	44/20	10	1.49	4.89
											CEPT3	1.94	6.36
735Z2  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB @ 15-90 MHz	PVC .013/..40	Gray .127/3.30 by .265/6.80	17.5	57.4	78%	75Ω	28/13	DS3	2.22	7.28
											STS1	2.39	7.84
73502  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .028/.71	Gray .186/4.72 by .313/7.95	17.5	57.4	78%	75Ω	37/17	50	3.35	10.99
											CEPT4	3.95	12.96
735T2  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	PVC .028/.71	Gray .186/4.72 by .400/10.2	17.5	57.4	78%	75Ω	44/20	STS3	4.18	13.71
											100	4.75	15.58
735Z2  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB @ 15-90 MHz	PVC .013/..40	Gray .127/3.30 by .265/6.80	17.5	57.4	78%	75Ω	28/13	DS4	5.58	18.31
											200	6.79	22.28

Standard packaging is 1000 ft (±5%) reels

735 Series DS-3/4 Halogen-Free Interconnect











Small diameters and flexible construction save space and aid installation

Meets Telcordia low-corrosivity, NEC/CEC CMG or CMR safety requirements

Each reel tested to assure performance

Multiconductor versions have individually-numbered legs for easy identification

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
 73501H NEC CMG-LS CEC CMG-LS	26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .013/.33	Gray .129/3.28	17.5	57.4	78%	75Ω	14/6	1 CEPT1 CEPT2 5 10 CEPT3 DS3 STS1 50 CEPT4 STS3 100 DS4 200	0.50 0.51 1.00 1.08 1.49 1.94 2.22 2.39 3.35 3.95 4.18 4.75 5.58 6.79	1.64 1.67 3.28 3.54 4.89 6.36 7.28 7.84 10.99 12.96 13.71 15.58 18.31 22.28
 73503H NEC CMR-LS CEC CMR-LS	Three (3) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .330/8.4	17.5	57.4	78%	75Ω	56/25			
 73506H NEC CMR-LS CEC CMR-LS	Six (6) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .434/11.1	17.5	57.4	78%	75Ω	104/47			
 73508H NEC CMR-LS CEC CMR-LS	Eight (8) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .490/12.5	17.5	57.4	78%	75Ω	132/60			
 73509H NEC CMR-LS CEC CMR-LS	Nine (9) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .545/13.9	17.5	57.4	78%	75Ω	149/68			
 73512H NEC CMR-LS CEC CMR-LS	Twelve (12) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .594/15.1	17.5	57.4	78%	75Ω	194/88			
 73516H NEC CMR-LS CEC CMR-LS	Sixteen (16) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .036/1.0	Gray .715/18.2	17.5	57.4	78%	75Ω	262/119			
 73524H NEC CMR-LS CEC CMR-LS	Twenty four (24) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .040/1.1	Gray .840/21.4	17.5	57.4	78%	75Ω	382/173			

Standard packaging is 1000 ft (±5%) reels

735 Series DS-3/4 Halogen-Free Cross-Connect



Lucent 735A/1735A Series Equivalent




Small diameters and flexible construction save space and aid installation

Meets Telcordia low-corrosivity, NEC/CEC CMG or CMR safety requirements

Each reel tested to assure performance

Multiconductor versions have individually-numbered legs for easy identification

Tracer leads help quickly identify DSX circuits

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
735T1H  NEC CMG-LS CEC CMG-LS	26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .014/.36	Gray .129/.328 by .226/5.75	17.5 57.4	78%	75Ω	14/6		1	0.50	1.64
											CEPT1	0.51	1.67
73502H  NEC CMR-LS CEC CMR-LS	Two (2) 26 AWG Solid SC 39.5Ω/130Ω	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .022/.56	Gray .186/4.72 by .313/7.95	17.5 57.4	78%	75Ω	37/17		5	1.08	3.54
											CEPT2	1.00	3.28
735T2H  NEC CMR-LS CEC CMR-LS	Two (2) 26 AWG Solid SC 39.5Ω/130Ω tracer is 22 AWG stranded TC	Foam PE .077/1.96	AL foil and 92% TC Braid 5.6Ω/18.4Ω Minimum SRL 30dB@ 15-90 MHz	Non- halogen .026/.70	Gray .182/4.70 by .410/10.5	17.5 57.4	78%	75Ω	44/20		10	1.49	4.89
											CEPT3	1.94	6.36
											DS3	2.22	7.28
											STS1	2.39	7.84
											50	3.35	10.99
											CEPT4	3.95	12.96
											STS3	4.18	13.71
											100	4.75	15.58
											DS4	5.58	18.31
											200	6.79	22.28

Standard packaging is 1000 ft (±5%) reels

734 Series DS-3/4 Plenum Interconnect

Lucent 2734A PL Equivalent



For lowest attenuation/extended distance applications

Meets NEC/CEC CMP plenum safety requirements

Flexible construction eases installation

Each reel tested to assure performance

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
734C1P	20 AWG Solid BC 10.7Ω/35.1Ω	Foam FEP .150/3.81	AL Foil and 80% TC Braid 2.7Ω/8.8Ω	Kynar .015/.38	Gray .215/5.5	17.0	55.8	80%	75Ω	39/18	1	0.25	0.82
											CEPT1	0.27	0.89
											CEPT2	0.49	1.61
											5	0.54	1.77
											10	0.76	2.49
											CEPT3	0.99	3.25
											DS3	1.15	3.77
											STS1	1.25	4.10
											50	1.75	5.74
											CEPT4	2.09	6.86
											STS3	2.22	7.28
											100	2.53	8.30
											DS4	3.03	9.94
											200	3.79	12.43

Standard packaging is 1000 ft (±5%) reels

734 Series DS-3/4 Non-Plenum Cross-Connect

with tracer wire

For lowest attenuation/extended distance applications

Meets NEC/CEC CMR riser safety requirements

Flexible construction eases installation

Each reel tested to assure performance

Tracer leads help quickly identify DSX circuits

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
734ST	20 AWG Solid SC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL Foil and 80% TC Braid 2.7Ω/8.8Ω	PVC .026/.70	Gray .236/6.0 by .340/8.7	17.0	55.8	80%	75Ω	43/20	1	0.27	0.88
											CEPT1	0.27	0.89
											CEPT2	0.51	1.67
											5	0.55	1.80
											10	0.77	2.53
											CEPT3	1.01	3.31
											DS3	1.16	3.80
											STS1	1.25	4.10
											50	1.74	5.71
											CEPT4	2.07	6.79
											STS3	2.19	7.18
											100	2.49	8.17
											DS4	2.94	9.64
											200	3.58	11.74

Standard packaging is 1000 ft (±5%) reels

734 Series DS-3/4 Non-Plenum Interconnect







Lucent 734A/734D Equivalent

For lowest attenuation/extended distance applications

Meets Telcordia low-corrosivity, NEC/CEC CMR riser safety requirements

Flexible construction eases installation

Each reel tested to assure performance

	Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
							pF/ft	pF/m				MHz/ Signal	dB/ 100'	db/ 100m
	734C1 NEC CMR CEC CMR	20 AWG Solid BC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	PVC .025/.64	Gray .236/6.0	17.0	55.8	80%	75Ω	34/15	1	0.27	0.88
												CEPT1	0.27	0.89
	734S1 NEC CMR CEC CMR	20 AWG Solid SC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	PVC .025/.64	Gray .236/6.0	17.0	55.8	80%	75Ω	33/15	CEPT2	0.51	1.67
												5	0.55	1.80
	734S6 NEC CMR CEC CMR	Six (6) 20 AWG Solid SC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	PVC .030/.80	Gray .78/19.8	17.0	55.8	80%	75Ω	278/126	10	0.77	2.53
												CEPT3	1.01	3.31
	734C12 NEC CMR CEC CMR	Twelve (12) 20 AWG Solid BC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	PVC .030/.80	Gray 1.0/25.4	17.0	55.8	80%	75Ω	546/248	DS3	1.16	3.80
												STS1	1.25	4.10
												50	1.74	5.71
												CEPT4	2.07	6.79
												STS3	2.19	7.18
												100	2.49	8.17
												DS4	2.94	9.64
												200	3.58	11.74

Standard packaging is 1000 ft (±5%) reels

734 Series DS-3/4 Halogen-Free Interconnect for riser applications





For lowest attenuation/extended distance applications

Meets NEC/CEC CMR riser safety requirements

Flexible construction eases installation

Each reel tested to assure performance

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
 NEC CMR-LS CEC CMR-LS	734C1H	20 AWG Solid BC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL Foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	Non- Halogen .025/.64	Gray .236/6.0	17.0 55.8	80%	75Ω	35/16	1	0.27	0.88
											CEPT1	0.27	0.89
											CEPT2	0.51	1.67
											5	0.55	1.80
											10	0.77	2.53
											CEPT3	1.01	3.31
											DS3	1.16	3.80
											STS1	1.25	4.10
											50	1.74	5.71
											CEPT4	2.07	6.79
											STS3	2.19	7.18
											100	2.49	8.17
											DS4	2.94	9.64
											200	3.58	11.74
 NEC CMR-LS CEC CMR-LS	734S1H	20 AWG Solid SC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL Foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	Non- Halogen .025/.64	Gray .236/6.0	17.0 55.8	80%	75Ω	34/15			

Standard packaging is 1000 ft (±5%) reels

734 Series DS-3/4 Halogen-Free Cross-Connect


For lowest attenuation/extended distance applications

Meets NEC/CEC CMR riser safety requirements

Flexible construction eases installation

Each reel tested to assure performance

Tracer leads help quickly identify DSX circuits

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
 NEC CMR-LS CEC CMR-LS	734STH	20 AWG Solid SC 10.7Ω/35.1Ω	Foam PE .150/3.81	AL Foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	Non- Halogen .026/.70	Gray .236/6.0 by .340/8.7	17.0 55.8	80%	75Ω	49/22	1	0.27	0.88
											CEPT1	0.27	0.89
											CEPT2	0.51	1.67
											5	0.55	1.80
											10	0.77	2.53
											CEPT3	1.01	3.31
											DS3	1.16	3.80
											STS1	1.25	4.10
											50	1.74	5.71
											CEPT4	2.07	6.79
											STS3	2.19	7.18
											100	2.49	8.17
											DS4	2.94	9.64
											200	3.58	11.74

Standard packaging is 1000 ft (±5%) reels

720 Series DS-3/4 Non-Plenum Interconnect



Small diameters and flexible double-braid construction save space and aid installation
 Meets NEC/CEC CMR riser safety requirements
 Each reel tested to assure performance
 Multiconductor versions have individually-numbered legs for easy identification

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
72001	24 AWG Solid BC 26.3Ω/86.3Ω	Foam PE .095/2.41	95% TC Braid and 95% TC Braid 3.2Ω/10.5Ω Minimum SRL 26dB@ 40-70 MHz	PVC .013/.33	Gray .155/.394	16.5	54.1	82%	75Ω	23/10	1	0.37	1.21
											CEPT1	0.38	1.25
Telco	24 AWG Solid BC 26.3Ω/86.3Ω	Foam PE .095/2.41	95% TC Braid and 95% TC Braid 3.2Ω/10.5Ω Minimum SRL 26dB@ 40-70 MHz	PVC .026/.70	Gray .672/17.1	16.5	54.1	82%	75Ω	375/170	5	0.88	2.89
											10	1.26	4.13
											CEPT3	1.66	5.45
											DS3	1.90	6.23
											STS1	2.07	6.79
											50	2.98	9.78
											CEPT4	3.53	11.58
											STS3	3.73	12.24
											100	4.24	13.91
											DS4	5.03	16.50
											200	6.15	20.18

Standard packaging is 1000 ft (±5%) reels

720 Series DS-3/4 Non-Plenum Cross-Connect

Small diameters and flexible double-braid construction save space and aid installation
 Meets NEC/CEC CMR riser safety requirements
 Each reel tested to assure performance
 Dual cables have red and gray component jackets for easy identification
 Tracer leads help quickly identify DSX circuits








Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
720T1	24 AWG Solid BC 26.3Ω/86.3Ω	Foam PE .095/2.41	95% TC Braid and 95% TC Braid 3.2Ω/10.5Ω Minimum SRL 26dB@ 40-70 MHz	PVC .013/.33	Gray .155/3.9 by .250/6.4	16.5	54.1	82%	75Ω	31/14	1	0.37	1.21
											CEPT1	0.38	1.25
Telco	24 AWG Solid BC 26.3Ω/86.3Ω	Foam PE .095/2.41	95% TC Braid and 95% TC Braid 3.2Ω/10.5Ω Minimum SRL 26dB@ 40-70 MHz	PVC .025/.64	Gray .205/5.2 by .436/11.1	16.5	54.1	82%	75Ω	60/27	5	0.88	2.89
											10	1.26	4.13
											CEPT3	1.66	5.45
											DS3	1.90	6.23
											STS1	2.07	6.79
											50	2.98	9.78
											CEPT4	3.53	11.58
											STS3	3.73	12.24
											100	4.24	13.91
											DS4	5.03	16.50
											200	6.15	20.18

Standard packaging is 1000 ft (±5%) reels

SBC Global Networks 734 Series Non-Plenum Interconnect



Meets SBC Interconnect Specifications

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
 73401S NEC CMR CEC CMR	20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 5-150 MHz	PVC .026/.66	Gray .235/5.97	17.7	58.1	80%	75Ω	33/15	1	0.28	0.92
											5	0.59	1.94
											10	0.80	2.62
											22.5	1.18	3.87
											50	1.82	5.97
											100	2.60	8.53
											150	3.22	10.56
 73403S 20 AWG NEC CMR CEC CMR	Three (3) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid .026/.66 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .568/14.4	Gray	17.7	58.1	80%	75Ω	134/61			
 73406S NEC CMR CEC CMR	Six (6) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .026/.66	Gray .780/19.8	17.7	58.1	80%	75Ω	278/126			
 73408S NEC CMR CEC CMR	Eight (8) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .026/.66	Gray .845/21.5	17.7	58.1	80%	75Ω	381/173			
 73409S NEC CMR CEC CMR	Nine (9) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .026/.66	Gray .880/22.4	17.7	58.1	80%	75Ω	412/187			
 73412S NEC CMR CEC CMR	Twelve (12) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .026/.66	Gray 1.00/25.4	17.7	58.1	80%	75Ω	547/248			
 73416S NEC CMR CEC CMR	Sixteen (16) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .026/.66	Gray 1.22/31.0	17.7	58.1	80%	75Ω				



Standard packaging is 1000 ft (±5%) reels

Telco

SBC Global Networks 734 Series Non-Plenum Cross-Connect



Meets SBC Cross-Connect Specifications








Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
734T1S  NEC CMR CEC CMR	20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω	PVC .026/.66	Gray .235/5.97	17.7	58.1	80%	75Ω	41/19	1	0.28	0.92
			Minimum SRL 35dB @ 5-150 MHz	5	0.59						1.94		
				10	0.80						2.62		
				22.5	1.18						3.87		
				50	1.82						5.97		
				100	2.60						8.53		
				150	3.22						10.56		
734ZT2S  NEC CMR CEC CMR	20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 85% TC Braid 2.7Ω/8.8Ω	PVC .026/.66 by .610/15.5	Gray .235/5.97	17.7	58.1	80%	75Ω	86/39			
			Minimum SRL 35dB @ 5-150 MHz										

Standard packaging is 1000 ft (±5%) reels

SBC Global Networks 735 Series Non-Plenum Interconnect



Meets SBC Interconnect Specifications

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
73501S  NEC CMR CEC CMR	26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 5-150 MHz	PVC .013/.40	Gray .134/3.4	18.0	59.0	78%	75Ω	14/6	1	0.50	1.64
											5	1.10	3.61
73503S  NEC CMR CEC CMR	Three (3) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .326/8.3	18.0	59.0	78%	75Ω	56/25	10	1.50	4.92
											22.5	2.30	7.55
73506S  NEC CMR CEC CMR	Six (6) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .444/11.3	18.0	59.0	78%	75Ω	104/47	50	3.40	11.16
											100	4.99	16.37
73508S  NEC CMR CEC CMR	Eight (8) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .514/13.1	18.0	59.0	78%	75Ω	132/60	150	6.00	19.68
73509S  NEC CMR CEC CMR	(9) Nine 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .534/13.6	18.0	59.0	78%	75Ω	149/68			
73512S  NEC CMR CEC CMR	Twelve (12) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .604/15.4	18.0	59.0	78%	75Ω	194/88			
73516S  NEC CMR CEC CMR	Sixteen (16) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .013/.40	Gray .725/18.5	18.0	59.0	78%	75Ω	261/118			



Standard packaging is 1000 ft (±5%) reels

Telco

SBC Global Networks 735 Series Non-Plenum Cross-Connect







Meets SBC Interconnect Specifications

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
735T1S  NEC CMR CEC CMR	26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 5-150 MHz	PVC .013/.33	Gray .134/3.4 by .250/6.35	18.0	59.0	78%	75Ω	23/10	1	0.50	1.64
											5	1.10	3.61
735ZT2S  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 40Ω/130Ω	Foam PE .077/1.96	AL foil and 95% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 5-150 MHz	PVC .015/.38	Gray .134/3.4 by .408/10.36	18.0	59.0	78%	75Ω	35/16	10	1.50	4.92
											22.5	2.30	7.54
											50	3.40	11.15
											100	4.99	16.37
											150	6.00	19.68


Standard packaging is 1000 ft (±5%) reels

Designed to meet WorldCom specifications.

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
734S1M  NEC CMR CEC CMR	20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB @ 15-90 MHz	PVC .026/.66	Gray .236/6.0	17.3	56.7	80%	75Ω	36/16	1	0.27	0.88
											CEPT1	0.27	0.88
734S2M  NEC CMR CEC CMR	Two (2) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB @ 15-90 MHz	PVC .026/.66 Bundled Jacket .030/.80	Gray .290/7.4 by .528/13.5	17.3	56.7	80%	75Ω	95/43	5	0.55	1.80
											CEPT2	0.51	1.68
734S6M  NEC CMR CEC CMR	Six (6) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 22.368 and 55-95 MHz	PVC .026/.66 Bundled Jacket .030/.80	Gray .780/19.9	17.3	56.7	80%	75Ω	278/126	10	0.77	2.53
											CEPT3	1.01	3.32
734S12M  NEC CMR CEC CMR	Twelve (12) 20 AWG Solid SC 11.0Ω/36.1Ω	Foam PE .148/3.76	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 32dB @ 22.368 and 55-95 MHz	PVC .026/.66 Bundled Jacket .030/.80	Gray 1.0/25.4	17.3	56.7	80%	75Ω	547/248	DS3	1.16	3.81
											ST51	1.25	4.10
											50	1.65	5.42
											CEPT4	1.74	5.71
											STS-3	2.07	6.79
											100	2.49	8.17
											DS4	2.94	9.65
											200	3.58	11.75




Standard packaging is 1000 ft (±5%) reels

Designed to meet WorldCom specifications.

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs /kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
734T1M  NEC CMR CEC CMR	20 AWG Solid SC 11.0Ω/36.1Ω tracer is 22 AWG stranded TC	Foam PE .148/3.76	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .026/.66	Gray .236/6.0	17.3	56.7	80%	75Ω	45/20	1	0.27	0.89
											CEPT1	0.27	0.89
											CEPT2	0.51	1.68
											5	0.55	1.81
											10	0.77	2.53
											CEPT3	1.01	3.32
											DS3	1.16	3.81
											STS1	1.25	4.10
											50	1.65	5.42
											CEPT4	1.74	5.71
											STS3	2.07	6.79
											100	2.49	8.17
											DS4	2.94	9.65
											200	3.58	11.75

Standard packaging is 1000 ft (±5%) reels









WorldCom 735 Series Non-Plenum Interconnect

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs /kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
73501M  NEC CMR CEC CMR	26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .128/3.3	17.5	57.4	78%	75Ω	14/6	1	0.50	1.64
											CEPT1	0.51	1.68
											CEPT2	1.00	3.28
											5	1.08	3.55
											10	1.49	4.89
											CEPT3	1.94	6.37
											DS3	2.22	7.29
											STS1	2.39	7.74
											50	3.35	10.99
											CEPT4	3.95	12.96
73502M  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .189/4.8 by .313/8.0	17.5	57.4	78%	75Ω	37/17	STS3	4.18	13.71
											100	4.75	15.58
											DS4	5.58	18.31
											200	6.79	22.28
73503M  NEC CMR CEC CMR	Three (3) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .351/9.0	17.5	57.4	78%	75Ω	56/25			

Standard packaging is 1000 ft (±5%) reels



Note: Multiple cables should average 35dB over all conductors in cable with no single conductor being lower than 32dB. When tested at 22.368 MHz and 55-95 MHz.

Designed to meet WorldCom specifications.

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs / kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
73506M  NEC CMR CEC CMR	Six (6) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .450/11.5	17.5	57.4	78%	75Ω	104/47	1	0.50	1.64
											CEPT1	0.51	1.68
											CEPT2	1.00	3.28
											5	1.08	3.55
											10	1.49	4.89
73508M  NEC CMR CEC CMR	Eight (8) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .497/12.7	17.5	57.4	78%	75Ω	132/60	CEPT3	1.94	6.37
											DS3	2.22	7.29
											STS1	2.39	7.84
											50	3.35	10.99
											CEPT4	3.95	12.96
73509M  NEC CMR CEC CMR	Nine (9) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .537/13.7	17.5	57.4	78%	75Ω	149/68	STS3	4.18	13.71
											100	4.75	15.58
											DS4	5.58	18.31
											200	6.79	22.28
73510M  NEC CMR CEC CMR	Ten (10) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .586/14.9	17.5	57.4	78%	75Ω	170/77			
73512M  NEC CMR CEC CMR	Twelve (12) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .605/15.4	17.5	57.4	78%	75Ω	194/88			
73516M  NEC CMR CEC CMR	Sixteen (16) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .676/17.2	17.5	57.4	78%	75Ω	262/119			
73518M  NEC CMR CEC CMR	Eighteen (18) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .705/17.9	17.5	57.4	78%	75Ω	274/124			
73524M  NEC CMR CEC CMR	Twenty Four (24) 26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 35dB @ 22.368 and 55-95 MHz	PVC .015/.38	Gray .840/21.4	17.5	57.4	78%	75Ω	382/173			

Standard packaging is 1000 ft (±5%) reels

Designed to meet WorldCom specifications.

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shield Type & Coverage Nom DCR kft / km	Jacket Type & Nom. Thickness in / mm	Cable Color OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Wt. per kft on reel lbs /kg	Nom Attenuation		
						pF/ft	pF/m				MHz/ Signal	dB/ 100'	dB/ 100m
735T1M  NEC CMR CEC CMR	26 AWG Solid SC 40.0Ω/131.2Ω	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB@ 15-90 MHz	PVC .013/.40 Outer Jacket is PVC .027/.70	Gray .128/3.3 by .226/5.8	17.5	57.4	78%	75Ω	17/8	1	0.50	1.64
	tracer is 22 AWG Stranded TC										CEPT1	0.51	1.68
735T2M  NEC CMR CEC CMR	Two (2) 26 AWG Solid SC 40.0Ω/131.2Ω tracer is 22 AWG Stranded TC	Foam PE .077/1.96	AL foil and 80% TC Braid 2.7Ω/8.8Ω Minimum SRL 30dB @ 15-90 MHz	PVC .013/.40 Outer Jacket is PVC .027/.70	Gray .186/3.3 by .400/10.2	17.5	57.4	78%	75Ω	44/20	5	1.00	3.28
											CEPT2	1.00	3.28
											10	1.08	3.55
											CEPT3	1.49	4.89
											DS3	1.94	6.37
											STS1	2.22	7.29
											50	2.39	7.84
											CEPT4	3.35	10.99
											STS3	3.95	12.96
											100	4.18	13.71
											DS4	4.75	15.58
											200	5.58	18.31
											200	6.79	22.28

Standard packaging is 1000 ft (±5%) reels

Suggested connectors for 735 Series cables

ADC	BNC735	WT-2 crimp/WD-2 die
Amphenol	31-70013-1002	CLT-6 crimp/22-980-7 handle 227-944
Gilbert	NS-5722-5	G-CRT crimp with .255 center pin die
Kings	2025-77-7	KT2185 braid/R5761 pin
Kings 90°	2026-22-7	KT2185 braid/R5761 pin
Lucent	Comcode 406133371	407060235 crimp/407060284 die
Trompeter	BNC 735D	CT-4 crimp/CD3-1 die and center pin crimp 010-0055

Suggested connectors for 734 Series cables

ADC	BNC734D	WT-2 crimp/WD-2 die
Amphenol	31-70008-1000 31-71008-1RFX1	CLT-8 crimp/.025 sq./.255 hex dies CLT-6 crimp/.025 sq./.255 hex dies CLT-1 crimp/.068 sq./.255 hex
Gilbert	G-BNC-62P145	G-CRT-255 crimp/.068 x .255 center pin die size
Kings	2025-76-7	KT2186 braid and R5761 pin
Kings 90°	2026-21-7	KT2186 braid and R5761 pin
Lucent	Comcode 405784273	407060235 crimp/407060284 die
Trompeter	UPL-220-025	CT-4 crimp/CD3-2 die - center pin crimp tool 010-0055

Suggested connectors for 720 Series cables

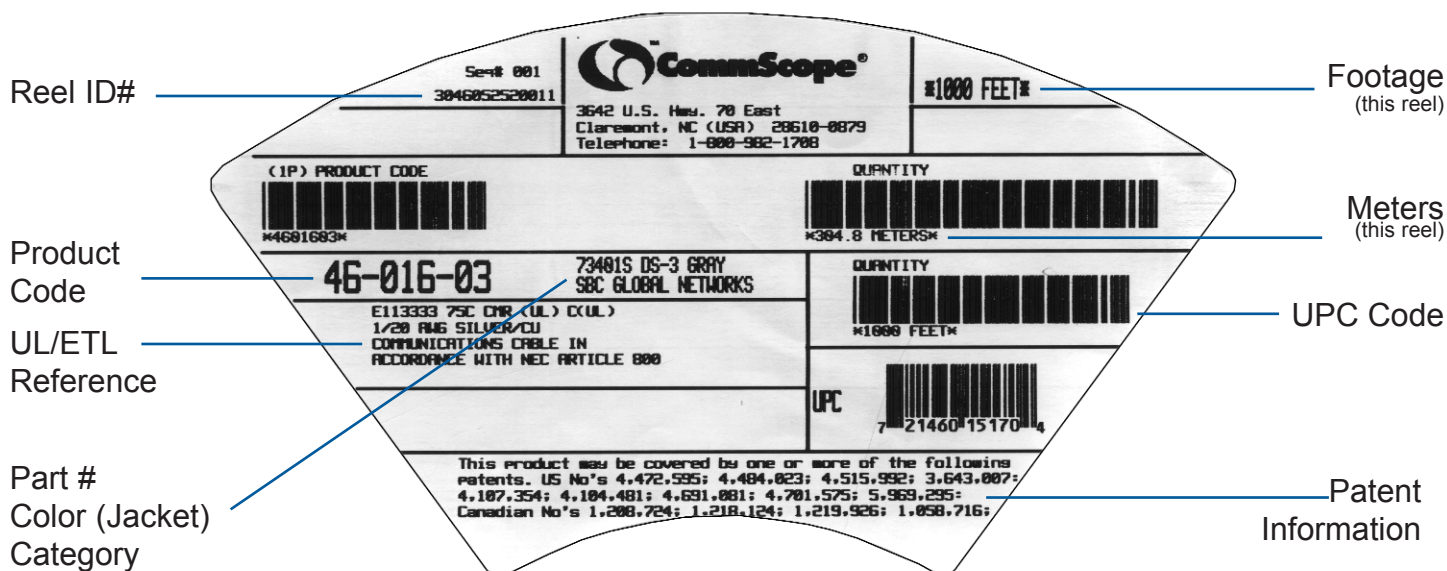
ADC	BNC0222	WT-1 crimp/WD-3 die
Amphenol	31-5386	227-944 crimp/227-944-5 die .213 X .400 die size/.049 x .093 center pin die size
Gilbert	NS-57225	G-CRT-792 crimp/.058 x .213 center pin die size
Trompeter	UPL-220-028	CT-3 crimp/CD3-1 die .178 X .480 die size/center pin crimp tool 010-0055

Lucent Part Number CommScope Part Number

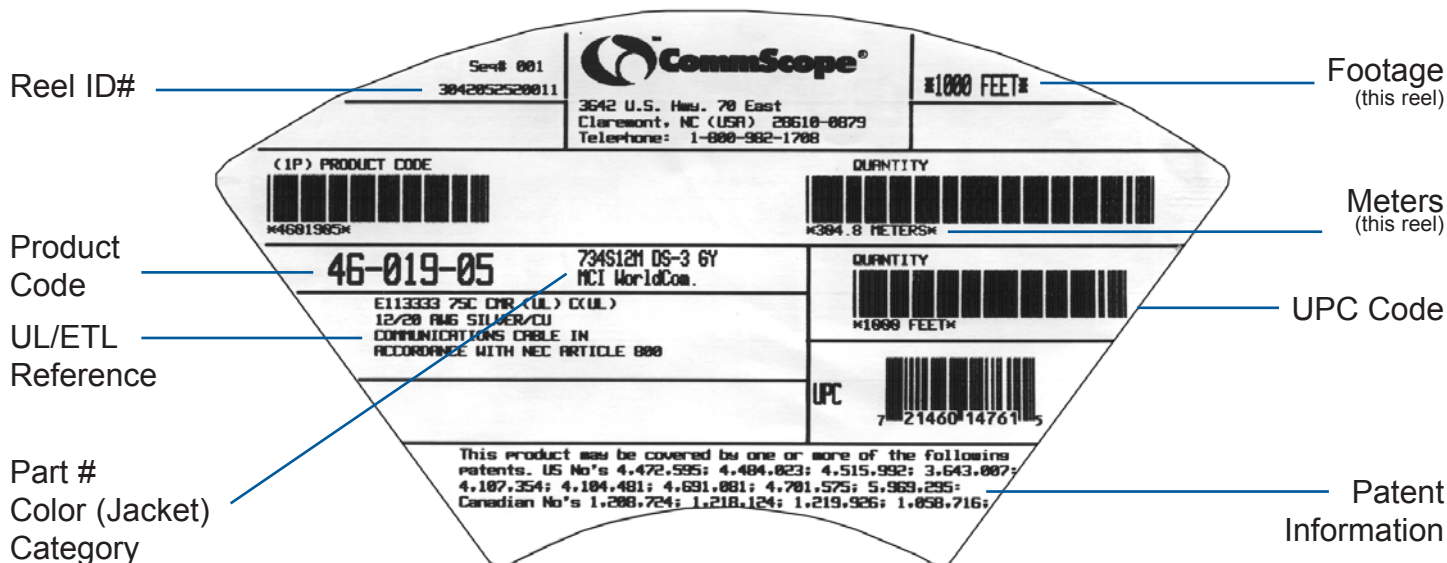
734A734C1
734D734S1
2734A734C1P

735A73501
1735 003A73503
1735 006A73506
1735 008A73508
1735 009A73509
1735 012A73512

SBC Package Label



WorldCom Package Label



Reel Size and Shipping Weights



CommScope Part Number	Product Code	Reel Size	lbs. /1000 ft.
Plenum			
734C1P	4132603	12 x 4 x 12	37.00
734C1PX4	4114104	30 x 12 x 12	163.00
73501P	4771903	10.25 x 4 x 7.25	16.50
735T1P	4771103	10.25 x 4 x 7.25	20.06
735T2P	4113504	12 x 4 x 12	47.85
73502P	4113704	12 x 4 x 12	43.55
73503P	4172905	18 x 6 x 11	64.73
73504P	4105405	18 x 6 x 11	82.06
73506P	4172705	22 x 6 x 11	106.53
Non Plenum			
72001	8208304	10.25 x 4 x 7.25	23.11
720T1	8214804	12 x 4 x 12	31.44
720T2	8204905	14.5 x 6 x 13	59.41
72012	4202206	35 x 16 x 18	374.51
72016	8200906	35 x 16 x 18	424.00
734C1	8242703	12 x 4 x 12	34.40
734S1	8267003	12 x 4 x 12	33.16
734S4	8208205	22 x 6 x 17.63	164.76
734S6	8205705	35 x 16 x 18	278.08
734S8	4602505	35 x 16 x 18	380.80
734C12	8221205	42.5 x 24 x 24	546.40
734S12	4601305	4.5 x 24 x 24	546.40
734ST	8291503	14.5 x 6 x 13	42.59
734C2	8232504	18 x 6 x 11	88.76
734S2	8224104	18 x 6 x 11	95.26
734S1B	4677003	12 x 4 x 12	33.16
734S6B	8209305	35 x 16 x 18	278.08
734S12B	4601405	42.5 x 24 x 24	546.40
73501	8239603	10.25 x 4 x 7.25	13.83
735T1	8249903	10.25 x 4 x 7.25	17.35
735Z2	8249703	12 x 4 x 12	27.85
735T2	8210504	14.5 x 6 x 13	44.29
73502	8210104	12 x 4 x 12	36.99
73542	8225304	12 x 4 x 12	40.59
73503	8210305	18 x 6 x 11	56.45
73506	8210605	22 x 6 x 11.63	104.64
73508	8210805	22 x 6 x 11.63	132.66
73509	8210905	30 x 12 x 12.63	153.66
73512	8210005	30 x 12 x 12.63	194.20
73516	8200406	30 x 12 x 12.63	262.63
73524	8202406	35 x 16 x 18	382.60
Non Halogen			
734C1H	8276503	12 x 4 x 12	34.96
734S1H	8272803	12 x 4 x 12	33.92
734STH	8272903	14.5 x 6 x 13	48.53
73501H	8213203	10.25 x 4 x 7.25	16.16
735T2H	8232204	12 x 4 x 12	51.17
73503H	8208305	18 x 6 x 11	54.55
73504H	8210105	18 x 6 x 11	87.76
73506H	8215605	22 x 6 x 11	115.85
73508H	8208805	22 x 6 x 11	157.10
73509H	8208905	22 x 6 x 17.63	176.27
73512H	8209005	30 x 12 x 12.63	213.98
73516H	8271606	30 x 12 x 12.63	301.05
73524H	8272406	35 x 16 x 18	406.70

Optical Plenum Distribution

Subunit bundle construction on higher fiber counts



Meets critical NEC plenum (OFNP) safety standards

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Numbered subunits and color-coded fibers help ease installation

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons Long term lbs./ Newtons	Weight lbs/1000' kg/1000m
4 Fiber	P-ØØ4-DS-XY-FSDZZ	.16/4.0	3.2/8.0 1.6/4.1	300/1350 100/445	15 22
6 Fiber	P-ØØ6-DS-XY-FSDZZ	.20/5.3	4.0/10.6 2.0/5.3	300/1350 100/445	16 24
8 Fiber	P-ØØ8-DS-XY-FSDZZ	.22/5.5	4.4/11.2 2.2/5.5	300/1350 100/445	18 27
12 Fiber	P-Ø12-DS-XY-FSDZZ	.22/5.5	4.4/11.2 2.2/5.5	300/1350 100/445	18 27
18-24 Fiber	Available in Heavy-Duty only- see page 53.				
30 Fiber (3 subunits)	P-Ø3Ø-DS-XY-FSDZZ	.58/14.7	12.6/32 6.3/16.0	800/3550 265/1175	118 176
36 Fiber (3 subunits)	P-Ø36-DS-XY-FSDZZ	.58/14.7	12.6/32 6.3/16.0	800/3550 265/1175	118 176
48 Fiber (4 subunits)	P-Ø48-DS-XY-FSDZZ	.58/14.7	12.6/32 6.3/16.0	800/3550 265/1175	118 176
60 Fiber (5 subunits)	P-Ø6Ø-DS-XY-FSDZZ	.70/17.8	14.4/36.8 7.2/18.4	1000/4450 330/1470	186 277
72 Fiber (6 subunits)	P-Ø72-DS-XY-FSDZZ	.77/19.6	14.4/36.8 7.2/18.4	1000/4450 330/1470	183 273
96 Fiber (8 subunits)	P-Ø96-DS-XY-FSDZZ	.80/20.4	16.0/40.8 8.0/20.4	1000/4450 330/1470	223 332
144 Fiber (12 subunits)	P-144-DS-XY-FSDZZ	.98/25.0	19.6/49.8 19.6/9.8	1000/4450 330/1470	288 429
Singlemode/Multimode Composite (4 - 144 fiber)	P-XXX-DS-CM-FSDXX/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count			

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Subunits are numbered for easy identification

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Plenum Distribution Cables

(72 and 12 fiber versions shown)

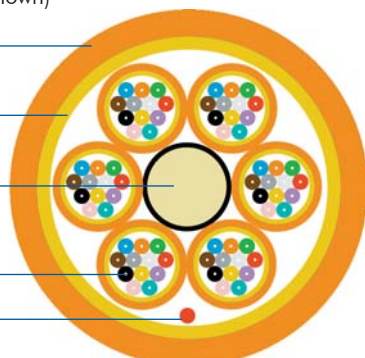
Plenum-rated
PVDF jacket

Aramid yarn

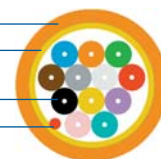
Dielectric central member
(with overcoat)

12 fiber subunit with
900 μ m tight-buffered
250 μ m fiber

Ripcord



Plenum-rated PVC jacket
Aramid yarn
12 fiber subunit with
900 μ m tight-buffered 250 μ m fiber
Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Optical Plenum Cordage

Several constructions available for a variety of uses



Meets critical NEC plenum (OFNP) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables absorb extra handling stress

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./ Newtons	Weight lbs/ 1000' kg/ 1000m
Simplex/1.8mm	P-ØØ1-SP-XY-F18ZZ	0.07/1.8	1.8/4.6	0.9/2.3	50/225	20/90	2.1 3.1
Simplex/2.0mm Special Minimum Order Required	P-ØØ1-SP-XY-F20ZZ	0.08/2.0	1.6/4.0	0.8/2.0	50/225	16/71	3.0 4.5
Simplex/2.5mm Special Minimum Order Required	P-ØØ1-SP-XY-F25ZZ	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8 8.6
Simplex/2.9mm Standard	P-ØØ1-SP-XY-F29ZZ	0.11/2.9	2.2/5.8	1.1/2.9	60/260	20/90	6.7 9.9
Duplex/2.5mm	P-ØØ2-DU-XY-F25ZZ	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.9 20.7
Zipcord/2.5mm Special Minimum Order Required	P-ØØ2-ZC-XY-F25ZZ	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9 17.7
Zipcord/2.9mm Standard	P-ØØ2-ZC-XY-F29ZZ	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8 23.5
2 fiber interconnect	P-ØØ2-IC-XY-F29ZZ	0.11/2.9	2.3/5.8	1.2/2.9	150/660	50/220	7.3 10.8
2 fiber interconnect	P-ØØ2-IC-XY-FSDZZ	0.14/3.6	2.8/7.2	1.4/3.6	270/1200	90/400	10.6 15.8

Variables in the Catalog Number:

XY = Fiber Grade

ZZ = Standard Jacket Color

Buffer Tube identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

1/Blue, 2/White

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

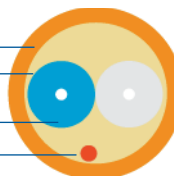
Plenum Simplex

Plenum-rated PVC jacket
900 μ m tight-buffered
250 μ m fiber
Aramid Yarn



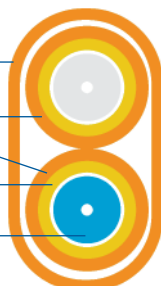
Plenum 2-fiber Interconnect

Plenum-rated PVC jacket
Aramid Yarn
900 μ m tight-buffered
250 μ m fibers
Ripcord



Plenum Duplex

Plenum-rated PVC outer jacket
Plenum-rated PVC jackets
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Plenum Zipcord

Plenum-rated PVC jacket
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Standard Cordage Jacket Colors

Singlemode - Yellow
Multimode - Orange

Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Optical Riser Distribution

Subunit bundle construction on higher fiber counts



Meets critical NEC riser (OFNR) safety standards

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber

Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Numbered subunits and color-coded fibers help ease installation

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./ Newtons	Weight lbs/ 1000'	kg/ 1000m
4 Fiber	R-ØØ4-DS-XY-FSDZZ	.16/4.0	3.2/8.0	1.6/4.1	300/1350	100/445	15	22
6 Fiber	R-ØØ6-DS-XY-FSDZZ	.20/5.3	4.0/10.6	2.0/5.3	300/1350	100/445	16	24
8 Fiber	R-ØØ8-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
12 Fiber	R-Ø12-DS-XY-FSDZZ	.22/5.5	4.4/11.2	2.2/5.5	300/1350	100/445	18	27
18-24 Fiber	Available in Heavy-Duty only- see page 53.							
30 Fiber (3 subunits)	R-Ø3Ø-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
36 Fiber (3 subunits)	R-Ø36-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
48 Fiber (4 subunits)	R-Ø48-DS-XY-FSDZZ	.58/14.7	12.6/32	6.3/16.0	800/3550	265/1175	118	176
60 Fiber (5 subunits)	R-Ø6Ø-DS-XY-FSDZZ	.70/17.8	14.4/36.8	7.2/18.4	1000/4450	330/1470	186	277
72 Fiber (6 subunits)	R-Ø72-DS-XY-FSDZZ	.77/19.6	14.4/36.8	7.2/18.4	1000/4450	330/1470	183	273
96 Fiber (8 subunits)	R-Ø96-DS-XY-FSDZZ	.80/20.4	16.0/40.8	8.0/20.4	1000/4450	330/1470	223	332
144 Fiber (12 subunits)	R-144-DS-XY-FSDZZ	.98/25.0	19.6/49.8	19.6/9.8	1000/4450	330/1470	288	429
Singlemode/Multimode Composite (4 - 144 fiber)	R-XXX-DS-CM-FSDXX/XYaaa/XYbbb	Custom design - sizes/specs will vary depending on fiber count						



Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

ZZ = Standard Jacket Color

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Subunits are numbered for easy identification

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

bbb is replaced by multimode fiber count

Riser Distribution Cables

(72 and 12 fiber versions shown)

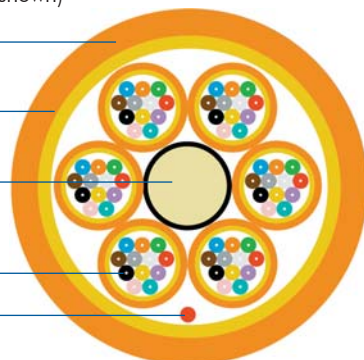
Riser-rated
PVC jacket

Aramid yarn

Dielectric central member
(with overcoat)

12 fiber subunit with
900 μ m tight-buffered
250 μ m fiber

Ripcord



12 Fiber Unit

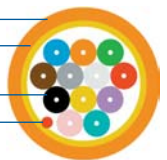
Riser-rated PVC jacket

Aramid yarn

12 fiber subunit with

900 μ m tight-buffered 250 μ m fiber

Ripcord



Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Optical Riser Cordage

Several constructions available for a variety of uses



Meets critical NEC riser (OFNR) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables absorb extra handling stresses

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125 μ m High Performance 9.0 MFD Fiber and (8A) 8.3/125 μ m High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125 μ m, (6F) Enhanced FDDI 62.5/125 μ m, and (5H) High Performance 50/125 μ m

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
Simplex/1.8mm	R-ØØ1-SP-XY-F18ZZ	0.07/1.8	1.8/4.6	0.9/2.3	50/225	20/90	2.1	3.1
Simplex/2.0mm Special Minimum Order Required	R-ØØ1-SP-XY-F20ZZ	0.08/2.0	1.6/4.0	0.8/2.0	50/225	16/71	3.0	4.5
Simplex/2.5mm Special Minimum Order Required	R-ØØ1-SP-XY-F25ZZ	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8	8.6
Simplex/2.9mm Standard	R-ØØ1-SP-XY-F29ZZ	0.11/2.9	2.2/5.8	1.1/2.9	60/260	20/90	6.7	9.9
Duplex/2.5mm	R-ØØ2-DU-XY-F25ZZ	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.9	20.7
Zipcord/2.5mm Special Minimum Order Required	R-ØØ2-ZC-XY-F25ZZ	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
Zipcord/2.9mm Standard	R-ØØ2-ZC-XY-F29ZZ	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8	23.5
2 fiber interconnect	R-ØØ2-IC-XY-F29ZZ	0.11/2.9	2.3/5.8	1.2/2.9	150/660	50/220	7.3	10.8
2 fiber interconnect	R-ØØ2-IC-XY-FSDZZ	0.14/3.6	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

Variables in the Catalog Number:

XY = Fiber Grade

ZZ = Standard Jacket Color

Buffer Tube identification colors:

6U (UltraFiber 62.5/125 μ m)

6F (Enhanced FDDI 62.5/125 μ m)

8A (8.3/125 μ m High Performance 9.3 MFD fiber)

OR (Orange- Multimode or Composite cable)

Minimum order required for special colors.

1/Blue, 2/White

5H (50/125 μ m)

8H (8.3/125 μ m High Performance 9.0 MFD fiber)

YL (Yellow- Singlemode cable)

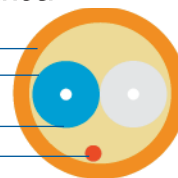
Riser Simplex

Riser-rated PVC jacket
900 μ m tight-buffered
250 μ m fiber
Aramid Yarn



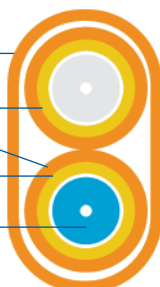
Riser 2-fiber Interconnect

Riser-rated PVC jacket
Aramid Yarn
900 μ m tight-buffered
250 μ m fibers
Ripcord



Riser Duplex

Riser-rated
PVC outer jacket
Riser-rated
PVC jackets
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Riser Zipcord

Riser-rated
PVC jacket
Aramid yarn
900 μ m tight-buffered
250 μ m fiber



Standard Cordage Jacket Colors

Singlemode - Yellow
Multimode - Orange

Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Optical LSZH Distribution

Low-Smoke Zero-Halogen construction permits riser and outdoor usage



Black or colored jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR) safety standards

Riser rating eliminates splice points at the building entrance

ARID-CORE® water blocking technology protects fibers from moisture

Low-smoke zero-halogen gives added protection to building occupants and equipment

Tight buffered construction reduces installation cost

Fiber types and grades available:

Singlemode: (8H) 8.3/125µm High Performance 9.0 MFD Fiber and (8A) 8.3/125µm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125µm, (6F) Enhanced FDDI 62.5/125µm, and (5H) High Performance 50/125µm

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./Newtons	Max. Tensile Load Long term lbs./Newtons	Weight lbs/1000'	Weight kg/1000m
4 Fiber (no central member)	Z-ØØ4-DS-XY-FSDBK	.16/4.0	3.2/8.0	1.6/5.5	300/1350	100/445	15	22
6 Fiber	Z-ØØ6-DS-XY-FSDBK	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	20	30
8 Fiber	Z-ØØ8-DS-XY-FSDBK	.25/6.4	5.0/12.8	2.5/6.4	300/1350	100/445	24	35
12 Fiber	Z-Ø12-DS-XY-FSDBK	.29/7.4	5.8/14.8	2.9/7.4	400/1800	140/600	38	56
18 Fiber	Z-Ø18-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	60	88
24 Fiber	Z-Ø24-DS-XY-FSDBK	.39/9.9	7.8/19.8	3.9/9.9	600/2700	160/710	49	72
Singlemode/Multimode Composite (4 - 24 fibers)	Z-XXX-DS-CM-FSDBK/XYaaa/XYbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number:

XXX = Total Fiber Count
XY = Fiber Grade

For Composites Only:

Fiber identification colors:

6U (UltraFiber 62.5/125µm)

6F (Enhanced FDDI 62.5/125µm)

8A (8.3/125µm High Performance 9.3 MFD fiber)

aaa is replaced with singlemode fiber count

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

5H (50/125µm)

8H (8.3/125µm High Performance 9.0 MFD fiber)

bbb is replaced by multimode fiber count

Triathlon Indoor/Outdoor LSZH Riser Distribution Cable

(24 fiber version shown)

Low smoke/zero halogen (LSZH) jacket

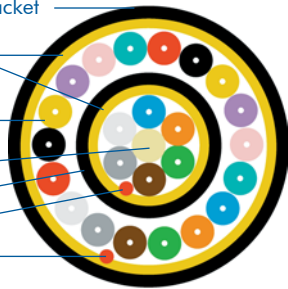
Aramid yarn/moisture barrier

900 µm LSZH tight-buffered 250 µm fiber

Dielectric central member

LSZH inner jacket

Ripcords



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	0 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Optical LSZH Cordage



Low-Smoke Zero-Halogen construction permits riser and outdoor usage

Black or colored jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR) safety standards

Riser rating eliminates splice points at the building entrance

ARID-CORE® water blocking technology protects fibers from moisture





Low-smoke zero-halogen gives added protection to building occupants and equipment

Simplex, duplex and zipcord cables available in a variety of sizes

Designed for ease of handling and termination

Fiber types and grades available:

Singlemode: (8H) 8.3/125μm High Performance 9.0 MFD Fiber and (8A) 8.3/125μm High Performance 9.3 MFD Fiber
Multimode: (6U) UltraFiber™ 62.5/125μm, (6F) Enhanced FDDI 62.5/125μm, and (5H) High Performance 50/125μm

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./ Newtons	Weight lbs/ 1000'	Weight kg/ 1000m
Simplex/2.0mm 	Z-ØØ1-SP-XY-F2ØBK	0.08/2.0	1.8/4.6	0.9/2.3	50/225	16/71	3.0	4.5
Simplex/2.5mm Special Minimum Order Required	Z-ØØ1-SP-XY-F25BK	0.10/2.5	2.0/5.1	1.0/2.5	60/260	20/90	5.8	8.6
Simplex/2.9mm Standard	Z-ØØ1-SP-XY-F29BK	0.11/2.9	2.2/5.8	1.1/2.8	60/260	20/90	6.7	9.9
Duplex/2.5mm Standard 	Z-ØØ2-DU-XY-F25BK	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.5	20.1
Zipcord/2.5mm Special Minimum Order Required 	Z-ØØ2-ZC-XY-F25BK	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
Zipcord/2.9mm Standard	Z-ØØ2-ZC-XY-F29BK	0.11/2.9 x 0.24/6.1	2.2/5.8	1.1/2.8	90/400	30/133	15.8	23.5
2 fiber interconnect 	Z-ØØ2-IC-XY-FSDBK	.14/36	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8

Variables in the Catalog Number:
XY = Fiber Grade

8H (8.3/125μm High Performance 9.0 MFD fiber)
8A (8.3/125μm High Performance 9.3 MFD fiber)
5H (50/125μm)

6F (Enhanced FDDI 62.5/125μm)
6U (UltraFiber 62.5/125μm)

Fiber identification colors:

1/Blue, 2/White

Triathlon Indoor/Outdoor LSZH Simplex

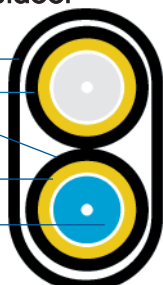
LSZH jacket
900μm LSZH tight-buffered
250μm fiber
Aramid Yarn



Triathlon Indoor/Outdoor LSZH Duplex

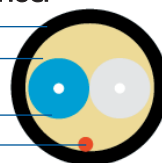
LSZH outer jacket
LSZH jackets

Aramid yarn
900μm LSZH
tight-buffered
250μm fiber



Triathlon Indoor/Outdoor LSZH 2-fiber Interconnect

LSZH jacket
Aramid yarn
900μm LSZH tight-buffered
250μm fibers
Ripcord



Triathlon Indoor/Outdoor LSZH Zipcord

LSZH jacket
Aramid yarn

900μm LSZH tight-buffered
250μm fiber



Mechanical Properties

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Bellcore GR-409
Impact Resistance	> Bellcore GR-409
Flexing	> Bellcore GR-409
Twist/Bend	> Bellcore GR-409

Singlemode/Multimode Fiber Specifications



A variety of fiber types for your applications

Different fiber types and grades help you match performance and cost:

- 6F (62.5/125 μ m graded index/FDDI grade)
 - 5H (50/125 μ m graded index/High-performance grade)
 - 8H (9.0 MFD Singlemode) & 8A (9.3 MFD Singlemode)
- Available in all CommScope cable types

6F Fiber - 62.5/125 μ m FDDI Multimode Performance

Attenuation Coefficient

Typical Attenuation - Outside Plant Loose and Central Tube Designs	3.0 dB/km @ 850 nm	0.7 dB/km @ 1300 nm
Typical Attenuation - Indoor/Outdoor Loose and Central Tube Designs	3.0 dB/km @ 850 nm	0.7 dB/km @ 1300 nm
Typical Attenuation - Tight Buffered Cables	3.0 dB/km @ 850 nm	0.9 dB/km @ 1300 nm
Maximum Attenuation - Outside Plant Loose and Central Tube Designs	3.5 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Maximum Attenuation - Indoor/Outdoor Loose and Central Tube Designs	3.5 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Maximum Attenuation - Tight Buffered Cables	3.7 dB/km @ 850 nm	1.5 dB/km @ 1300 nm
Minimum Modal Bandwidth	160 MHz•km @ 850 nm	500 MHz•km @ 1300 nm
Numerical Aperture	0.275 \pm 0.015	
Core Diameter	62.5 \pm 3.0 μ m (ovality of \leq 6.0 %/concentricity error of \leq 1.0 μ m)	
Cladding Diameter	125 \pm 2.0 μ m (concentricity error of \leq 1.0 μ m)	
Coating Diameter	245 \pm 10 μ m (ovality of \leq 6.0 %)	
Proof test	> 100 kpsi	

5H Fiber - 50/125 μ m High-performance Multimode Performance

Attenuation Coefficient

Typical Attenuation - Outside Plant Loose and Central Tube Designs	2.5 dB/km @ 850 nm	0.9 dB/km @ 1300 nm
Typical Attenuation - Indoor/Outdoor Loose and Central Tube Designs	2.5 dB/km @ 850 nm	0.9 dB/km @ 1300 nm
Typical Attenuation - Tight Buffered Cables	2.9 dB/km @ 850 nm	0.9 dB/km @ 1300 nm
Maximum Attenuation - Outside Plant Loose and Central Tube Designs	2.7 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Maximum Attenuation - Indoor/Outdoor Loose and Central Tube Designs	2.7 dB/km @ 850 nm	1.0 dB/km @ 1300 nm
Maximum Attenuation - Tight Buffered Cables	3.7 dB/km @ 850 nm	1.5 dB/km @ 1300 nm
Minimum Modal Bandwidth	400 MHz•km @ 850 nm	400 MHz•km @ 1300 nm
Numerical Aperture	0.200 \pm 0.015	
Core Diameter	50.0 \pm 3.0 μ m (ovality of \leq 6.0 %/concentricity error of \leq 1.0 μ m)	
Cladding Diameter	125 \pm 2.0 μ m (concentricity error of \leq 1.0 μ m)	
Coating Diameter	245 \pm 10 μ m (ovality of \leq 6.0 %)	
Proof test	> 100 kpsi	

8H

8A

Attenuation Coefficient

Maximum Attenuation - Outside Plant Loose and Central Tube Designs	0.35 dB/km @ 1310 nm	0.35 dB/km @ 1310 nm
	0.25 dB/km @ 1550 nm	0.25 dB/km @ 1550 nm
Maximum Attenuation - Indoor/Outdoor Loose and Central Tube Designs	0.5 dB/km @ 1310 nm	0.5 dB/km @ 1310 nm
	0.5 dB/km @ 1550 nm	0.5 dB/km @ 1550 nm
Maximum Attenuation - Tight Buffered Cables	0.7 dB/km @ 1310 nm	0.7 dB/km @ 1310 nm
	0.7 dB/km @ 1550 nm	0.7 dB/km @ 1550 nm
Mode Field Diameter	9.0	9.3
Mode Field Diameter Tolerance	\pm 0.3	\pm 0.5
Cladding Diameter	125 \pm 1.0 μ m	125 \pm 1.0 μ m
Coating Diameter	245 \pm 10 μ m	245 \pm 10 μ m
Index of Refraction	1.470 μ m \pm 0.5 μ m	1.470 μ m \pm 0.5 μ m
Proof test	> 100 kpsi	> 100 kpsi

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for coaxial catalog

Coaxial cables are commonly referred to with a "RG" designation. For the purpose of being consistent with corresponding specifications within SCTE IPS-SP-001 and TIA/EIA-570-A, the "Series" designation is used for relevant cables in this catalog.

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Cable Fire Ratings Matrix

for coax cables



As well as being manufactured to strict quality and performance standards, CommScope cables are designed to meet or exceed safety standards as set forth in the National Electric Code (NEC) and Canadian Electrical Code (CEC) for their intended applications. Use of special materials, such as our own formulation of CommFlex jacketing materials, helps maintain superior performance and handling characteristics with no loss of safety.

NEC/CEC Cable Types

- CM** communication cable as defined by NEC Article 800, CEC
- CL3, CL2** remote control, signaling, power limited cable as defined by NEC Article 725
- FPL** fire protective power limited cable as defined by NEC Article 760
- CATV** community antenna television cable as defined by NEC Article 820

NEC/CEC Fire Rating Suffixes

- P** Plenum
- R** Riser
- G** General Purpose
- X** Residential (NEC)
- H** Residential (CEC)

Coax	RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																	Permissible Substitutions per CEC						
	75 Ohm				CMF	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMF	CMR/CMG	CM/CMH		
High Performance RGBSC, Miniature	203505	136			X												*	*	*					X				
	753603	136					X												*							X		
	753604	136					X												*							X		
	753605	136					X												*							X		
	7538	136					X												*							X		
Precision Video	7501	137																										
	7505	137			X													*	*						X			
HDTV Video	2065V	137		X													*	*	*					X				
	2279V	137		X													*	*	*					X				
	5565	138			X													*	*						X			
	5765	138			X													*	*						X			
Series 6 DSS/Commercial	0132V	130		X													*	*	*					X				
	0359V	130		X													*	*	*					X				
	2227V	130		X													*	*	*					X				
TVRO Satellite Flat Style	0458	132																										
	8060	132																										
	8126	132																										
	8136	132																										
	8530	132																										
	8236	132		X																				X				
TVRO Direct Burial Jacket Material																												

X Denotes primary rating

* May be substituted with restrictions (see NEC 760-51).

Cable Fire Ratings Matrix Continued

for coax cables



RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																			Permissible Substitutions per CEC											
				CMF	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMF	CMR/CMG	CM/CMH									
75 Ohm	2020K	118		X												*	*	*					X											
	2020V	118		X												*	*	*					X											
	2022V	118		X												*	*	*					X											
	2037V	133		X												*	*	*					X											
	2039V	133		X												*	*	*					X											
	2041K	118		X												*	*	*					X											
	2045V	118		X												*	*	*					X											
	2054K	118		X												*	*	*					X											
	2054V	133		X												*	*	*					X											
	5540	118				X																			X									
	5553	133				X												*					X											
	5554	133				X																	X											
	5555	118				X																			X									
	5560	118	1354										X																					
	5563	119				X																			X									
	5571	119				X												*							X									
	5572	119				X												*							X									
	5572R	119			X												*	*					X											
	5573	119				X																			X									
	5574	119																																
	5575	128				X																			X									
	5586	128				X																			X									
Series 6	0132V	125		X																			X											
	0359V	125		X																			X											
	0461	125				X																		X										
	0467	125				X																		X										
	0490	131			X																			X										
	0491	131			X																			X										
	2220V	120		X												*	*	*					X											
	2227K	120		X												*	*	*					X											
	2227V	120		X												*	*	*					X											
	2229V	120		X												*	*	*					X											
	2275K	120		X												*	*	*					X											

X Denotes primary rating

* May be substituted with restrictions (see NEC 760-51).

For information, call Corporate 800.982.1708, Customer Service 800.544.1948, Fax 828.459.5099 or go to www.commscope.com

Cable Fire Ratings Matrix Continued

for coax cables



Coax

Series 6 Cont.

Series 11

RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																			Permissible Substitutions per CEC			
				CMP	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMP	CMR/CMG	CM/CMH	
75 Ohm	2275V	120		X													*	*	*					X		
	2276V	120		X													*	*	*					X		
	2277V	134		X													*	*	*					X		
	2279V	120		X													*	*	*					X		
	5654	134				X																		X		
	5700	134		CM Rated Jacket																					X	
	5715	121				X												*							X	
	5722	121																		X						
	5725	121/125				X												*						X		
	5726	121				X												*						X		
	5726R	121			X												*	*						X		
	5728	121		PE Jacketed For Direct Burial Applications																						
	5729	125				X																		X		
	5730	126				X																		X		
	5731	125				X																		X		
	5740	121,125 & 131				X																		X		
	5740F	122				X																			X	
	5740R	121			X												*	*						X		
	5741	122		PE Jacketed For Direct Burial Applications																						
	5742	122/125				X																		X		
	5765	122			X												*	*						X		
	5781	126				X																			X	
	5782	126				X																			X	
	5786	126				X																			X	
	5787	127		PE Jacketed For Direct Burial Applications																						
	5788	126				X																			X	
	5789	127		PE Jacketed For Direct Burial Applications																						
	5796	122				X												*							X	
Series 11	2282K	123		X												*	*	*					X			
	2284K	134		X												*	*	*					X			
	2285K	123		X												*	*	*					X			
	2287K	123		X												*	*	*					X			
	5901	123				X											*								X	

X Denotes primary rating

* May be substituted with restrictions (see NEC 760-51).

Cable Fire Ratings Matrix Continued

for coax cables



RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																		Permissible Substitutions per CEC		
				CMP	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMP	CMR/CMG
75 Ohm	5906	138			X											*	*						X	
	5910	123		PE Jacketed For Direct Burial Applications																				
	5912R	123																X						
	5913	124			X											*						X		
	5914	124		PE Jacketed For Direct Burial Applications																				
	5915	124								X									X					
	5916	127			X																		X	
	5916R	127		X																		X		
	5917	127		PE Jacketed For Direct Burial Applications																				
	5918	127			X																		X	
	5940	124			X												*							X
	5950	135			X											*	*							X
Series 7	7530	138			X											*							X	
Plenum Trunk	2312K	124		X											*	*	*					X		

X Denotes primary rating

* May be substituted with restrictions (see NEC 760-51).

Cable Fire Ratings Matrix Continued

for coax cables



RG type 50 Ohm	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																		Permissible Substitutions per CEC		
				CMP	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMP	CMR/CMG
RG58	2100V	139		X											*	*	*					X		
	2104V	139		X											*	*	*					X		
	3104	139			X											*	*						X	
	3130	139				X											*							X
	3135	139				X											*							X
	3136	139		PE Jacketed For Direct Burial Applications																				
	3139	139				X											*							X
RG8	3247	140										X												
	3249	140	1354									X												
	7815	140		PE Jacketed For Direct Burial Applications																				
RG213	7713	140	1354									X												
RG214	7714	141	1354									X												
Other (Ethernet)	2280K	141		X											*	*	*					X		
Wireless WAN	0623	143			X											*	*						X	
	0624	143			X											*	*						X	
	0668	143			X											*	*						X	
	0669	143			X											*	*						X	
	0670	143			X											*	*						X	
VSAT Types I, II, III 50Ω Plenum	2125K	128		X																		X		
	2426K	128		X																		X		
	2427K	128		X																		X		
VSAT Types I, II, III 50Ω Non-Plenum	7725	129		PE Jacketed For Direct Burial Applications																				
	7726	129		X																		X		
	3222	129		PE Jacketed For Direct Burial Applications																				
	3226	129		PE Jacketed For Direct Burial Applications																				
	3228	129				X																		X
	3227	129		PE Jacketed For Direct Burial Applications																				
	3229	129				X																	X	

Cable Fire Ratings Matrix Continued

for coax cables



RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																			Permissible Substitutions per CEC		
				CMP	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMP	CMR/CMG	CM/CMH
RG62	2249V	142		X												*	*	*					X		
	2250V	142		X												*	*	*					X		
	6609	142	1478									X													

RG type	Part No.	Page No.	AWM Rating	Permissible Substitutions per NEC																			Permissible Substitutions per CEC		
				CMP	CMR	CM/CMG	CMX	CL2P	CL3P	CL2R	CL3R	CL2	CL3	CL2X	CL3X	FPLP	FPLR	FPL	CATVP	CATVR	CATV	CATVX	CMP	CMR/CMG	CM/CMH
Twinax	2291K	142		X												*	*	*					X		
	7901	142										X													

X Denotes primary rating

* May be substituted with restrictions (see NEC 760-51).

Conductors in coaxial cable are either solid or stranded wire. Solid conductors are described by their diameter and material (i.e. 18 AWG Solid TC) while stranded conductors include their stranding (i.e. 20 AWG (19x32 AWG) Strand TC).

Center Conductor

BC - Bare Copper
SC - Silvered Copper
TC - Tinned Copper
CCA - Copper Clad Aluminum
CCS - Copper Covered Steel

Most CommScope coaxial cables have foamed (or cellular) dielectrics for better velocity of propagation characteristics. Different materials are used to meet electrical and fire-safety performance.

Dielectric

Foam PE - Foamed Polyethylene
Solid PE - Solid Polyethylene
Foam FEP - Foamed Fluorinated Ethylene Propylene (generic or Teflon® brand)
Solid FEP - Solid Fluorinated Ethylene Propylene
AD/PE - Air Dielectric created with a Polyethylene filament

Shields

Coaxial shields (also called the outer conductor) come in several varieties. Two types of coverage are: **Foil**, where aluminum is bonded to both sides of a polypropylene or polyester tape to provide 100% coverage and **Braid** where flexible wire is woven around the dielectric. Braid coverage designation is given as a percentage followed by a two letter code representing the material of the braid (i.e. 96% TC braid would be 96% coverage of a Tin Copper braid).

ALS - Aluminum sheath
AL - Aluminum braid
BC - Bare Copper braid
SC - Silver Copper braid
TC - Tin Copper braid

Jackets

Jacket material may vary depending on application. Plenum-rated cables provide superior fire safety, while flame-retardant PVC are used in riser, general purpose and residential situations. Outdoor cables (especially those meant for burial) are usually sheathed in polyethylene.

K - Kynar™ Polyvinylidene Fluoride (PVDF - used in plenum cables)
V - CommFlex, our proprietary jacketing compound (used in plenum cables)
PE - Polyethylene (Direct Burial Applications)
PVC - Polyvinylchloride








Teflon is a registered trademark of E.I. DuPont de Nemours and Co.



Broadband Video/Video Distribution, MATV

75Ω Coax Cables, Series 59 Type



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2020K/2020V Plenumax®  NEC CMP CEC CMP	20 AWG Solid CCS 47.0Ω/154Ω	Foam FEP .135/3.43	AL foil and 65% AL braid 10.3Ω/33.8Ω	PVDF(K) .015/.38 CommFlex®(M) .015/.38	Cream .202/5.1 White .202/5.1	16.0	52.5	84%	75Ω	1	0.34	1.12
										10	1.07	3.51
										50	1.84	6.04
										100	2.50	8.20
										200	3.53	11.58
										400	5.35	17.55
										700	7.07	23.19
										900	8.02	26.31
										1000	8.45	27.72
2022V Plenumax  NEC CMP CEC CMP	20 AWG Solid CCS 47.0Ω/154Ω	Foam FEP .135/3.43	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 6.3Ω/20.7Ω	CommFlex(V) .015/.38	White .235/6.0	16.0	52.5	84%	75Ω	1	0.34	1.12
										10	1.07	3.51
										50	1.84	6.04
										100	2.50	8.20
										200	3.53	11.58
										400	5.35	17.55
										700	7.07	23.19
										900	8.02	26.31
										1000	8.45	27.72
2041K Plenumax  NEC CMP CEC CMP	23 AWG Solid CCS 51.9Ω/170Ω	Solid FEP .135/3.43	95% BC braid 2.7Ω/8.9Ω	PVDF(K) .015/.38	Cream .197/5.0	19.5	64.0	82%	75Ω	1	0.40	1.31
										10	1.04	3.41
										50	2.43	7.97
										100	3.55	11.64
										200	5.29	17.35
										400	8.05	26.40
										700	11.67	38.28
										900	13.89	45.56
										1000	14.92	48.94
2045K/2045V Plenumax  NEC CMP CEC CMP	20 AWG Solid CCS 47.0Ω/154Ω	Foam FEP .135/3.43	AL foil and 90% TC braid 3.2Ω/10.5Ω	PVDF(K) .015/.38 CommFlex(V) .015/.38	White .202/5.1	16.0	52.5	82%	75Ω	1	0.34	1.12
										10	1.07	3.51
										50	1.84	6.04
										100	2.50	8.20
										200	3.53	11.58
										400	5.35	17.55
										700	7.07	23.19
										900	8.02	26.31
										1000	8.45	27.72
5540  NEC CM CEC CMH	20 AWG Solid CCS 47.0Ω/154Ω	Foam PE .144/3.66	Quad shield AL foil, 40% AL braid, AL foil and 60% braid 6.2Ω/20.3Ω	Flame- retardant PVC .035/.89	Black .265/6.7	16.0	52.5	82%	75Ω	1	0.26	0.85
										10	0.81	2.66
										50	1.74	5.71
										100	2.40	7.87
										200	3.34	10.96
										400	4.78	15.68
										700	6.42	21.06
										900	7.30	23.94
										1000	7.69	25.22
5555  NEC CM CEC CMH	22 AWG Solid CCS 46.1Ω/151Ω	Foam PE .144/3.66	95% BC braid 2.7Ω/8.9Ω	Flame- retardant PVC .035/.89	Black .242/6.1	16.2	53.2	78%	80Ω	1	0.30	0.97
										10	0.92	3.01
										50	2.10	6.89
										100	2.90	9.51
										200	4.10	13.45
										400	5.90	19.36
										700	7.80	25.59
										900	8.80	28.87
										1000	9.30	30.51
5560  AWM 1354	22 AWG Solid CCS 46.1Ω/151Ω	Foam PE .146/3.71	90% BC braid 2.7Ω/8.9Ω	Flame- retardant PVC .035/.89	Black .242/6.1	21.0	68.9	66%	73Ω	1	0.29	0.95
										10	0.99	3.25
										50	2.38	7.81
										100	3.49	11.45
										200	5.09	16.70
										400	7.54	24.73
										700	10.54	34.57
										900	12.28	40.28
										1000	13.03	42.74






Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

For information, call Corporate 800.982.1708, Customer Service 800.544.1948, Fax 828.459.5099 or go to www.commscope.com

Broadband Video/Video Distribution, MATV



75Ω Coax Cables, Series 59 Type







Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
 NEC CEC CM CMH	5563 23 AWG Solid CCS 51.9Ω/170Ω	Solid PE .146/3.71	95% BC braid 2.7Ω/8.9Ω	PVC .035/.89	Black .242/6.1	16.2	53.2	66%	75Ω	1	0.29	0.95
										10	0.99	3.25
										50	2.38	7.81
										100	3.49	11.45
										200	5.09	16.70
										400	7.54	24.73
										700	10.54	34.57
										900	12.28	40.28
										1000	13.03	42.74
										 NEC CEC CM CMH	5571 20 AWG Solid CCS 47.0Ω/154Ω	Foam PE .144/3.66
10	0.81	2.66										
50	1.74	5.71										
100	2.40	7.87										
200	3.34	10.96										
400	4.78	15.68										
700	6.42	21.06										
900	7.30	23.94										
1000	7.69	25.22										
 NEC CEC CM CMH	5572 20 AWG Solid CCS 47.0Ω/154Ω	Foam PE .144/3.66	AL foil and 67% AL braid 10.5Ω/34.5Ω	Flame- retardant PVC .035/.89	Black .242/6.1	16.2	53.2	82%	75Ω			
										10	0.81	2.66
										50	1.74	5.71
										100	2.40	7.87
										200	3.34	10.96
										400	4.78	15.68
										700	6.42	21.06
										900	7.30	23.94
										1000	7.69	25.22
										 NEC CEC CM CMH	5573 20 AWG Solid CCS 47.0Ω/154Ω	Foam PE .144/3.66
10	0.81	2.66										
50	1.74	5.71										
100	2.40	7.87										
200	3.34	10.96										
400	4.78	15.68										
700	6.42	21.06										
900	7.30	23.94										
1000	7.69	25.22										
 Outdoor/Flooded	5574 Burial 											

Specifications subject to change without notice.

Broadband Video/Video Distribution/MATV

75Ω Coax Cables, Series 6 Type








Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
									MHz	dB/100'	dB/100m
 2227K/2227V Plenumax NEC CEC CMP CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 5.3Ω/17.4Ω	PVDF(K) .016/.41 CommFlex(V) .015/.41	Cream .260/6.6 White .264/6.7	16.0 52.5	84%	75Ω	1	0.37	1.21
									10	0.95	3.12
									50	2.01	6.59
									100	2.72	8.92
									200	3.80	12.46
									400	5.40	17.71
									700	7.00	22.96
									900	8.05	26.40
 2220V Plenumax NEC CEC CMP CMP	2220 is a dual version of 2227 with identical electrical characteristics					White .264/6.7 by .558/14.2 wide			1000	8.60	28.21
 2229V Plenumax NEC CEC CMP CMP	18 AWG Solid BC 6.50Ω/21.3Ω	Foam FEP .170/4.32	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid, 5.3Ω/17.4Ω	CommFlex(V) .016/.41	White .264/6.7	16.0 52.5	84%	75Ω	1	0.21	0.69
									10	0.65	2.13
									50	1.46	4.79
									100	2.04	6.69
									200	2.98	9.78
									400	4.46	14.63
									700	5.89	19.33
									900	7.47	24.51
 2275K/2275V Plenumax NEC CEC CMP CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil and 60% AL braid 9.0Ω/21.0Ω	PVDF(K) .016/.41 CommFlex(V) .015/.41	Cream .237/6.0 White .237/6.0	16.0 52.5	84%	75Ω	1	0.25	0.82
									10	0.71	2.33
									50	1.47	4.82
									100	2.01	6.59
									200	2.82	9.25
									400	4.13	13.55
									700	5.85	19.19
									900	6.87	22.53
 2276V Plenumax NEC CEC CMP CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil and 90% AL braid 6.4Ω/21.0Ω	CommFlex(V) .014/.36	Black White .237/6.0	16.0 52.5	84%	75Ω	1	0.38	1.25
									10	0.72	2.37
									50	1.56	5.12
									100	2.14	7.03
									200	3.02	9.92
									400	4.85	15.93
									700	6.15	20.20
									900	7.76	25.49
 2279V Plenumax NEC CEC CMP CMP	18 AWG Solid BC 6.50Ω/21.3Ω	Foam FEP .170/4.32	AL foil and 95% TC braid 2.8Ω/9.3Ω	CommFlex(V) .015/.406	White .237/6.02	16.0 52.5	84%	75Ω	1	0.21	0.69
									3.6	0.40	1.31
									10	0.65	2.13
									71.5	1.75	5.74
									135	2.37	7.77
									270	3.46	11.35
									360	4.23	13.87
									720	5.97	19.58
1000	6.20	20.34									

Specifications subject to change without notification.
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Broadband Video/Video Distribution, MATV

75Ω Coax Cables, Series 6 Type



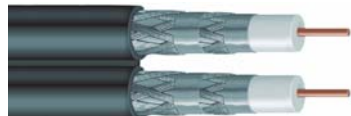

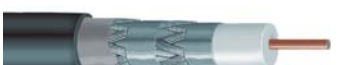


Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5715  NEC CM CEC CMH AWM Style 1354	18 AWG Solid BC 6.50Ω/21.3Ω	Foam PE .180/4.57	AL foil and 60% TC braid 9.0Ω/29.5Ω	Flame- retardant PVC .030/.76	Black .272/6.9	16.2	53.4	82%	75Ω	1	0.20	0.66
										10	0.76	2.49
										50	1.46	4.79
										100	2.05	6.72
										200	2.83	9.28
										400	4.05	13.28
										700	5.60	18.37
										900	6.23	20.43
										1000	6.80	22.30
										5722 w/0.051" Messenger Aerial Outdoor	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57
10	0.81	2.62										
50	1.46	4.79										
100	2.05	6.72										
200	2.83	9.28										
400	4.05	13.28										
700	5.60	18.37										
900	6.23	20.43										
1000	6.80	22.30										
5725  NEC CM CEC CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil and 40% AL braid 14.9Ω/48.9Ω	Flame- retardant PVC .030/.76	Black .272/6.9	16.0	52.5	82%	75Ω			
										10	0.81	2.66
										50	1.46	4.79
										100	2.05	6.72
										200	2.83	9.28
										400	4.05	13.28
										700	5.60	18.37
										900	6.23	20.43
										1000	6.80	22.30
										5726  NEC CMG CEC CM	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57
10	0.81	2.62										
50	1.46	4.79										
100	2.05	6.72										
200	2.83	9.28										
400	4.05	13.28										
700	5.60	18.37										
900	6.23	20.43										
1000	6.80	22.30										
5726R NEC CMR CEC CMR	5726R is a riser version of 5726 with identical electrical characteristics											
5728  Outdoor/Flooded	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil and 60% AL braid 9.0Ω/29.5Ω	PE with Floodant .030/.76	Black .272/6.9	16.2	53.1	82%	75Ω	1	0.26	0.85
										10	0.81	2.62
										50	1.46	4.79
										100	2.05	6.72
										200	2.83	9.28
										400	4.05	13.28
										700	5.60	18.37
										900	6.23	20.43
										1000	6.80	22.30
										5740  NEC CMG CEC CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57
10	0.81	2.62										
50	1.46	4.79										
100	2.05	6.72										
200	2.83	9.28										
400	4.05	13.28										
700	5.60	18.37										
900	6.23	20.43										
1000	6.80	22.30										
5740R NEC CMR CEC CMR	5740R is a riser version of 5740 with identical electrical characteristics											

Specifications subject to change without notice.

Broadband Video/Video Distribution, MATV



75Ω Coax Cables, Series 6 Type

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
									MHz	dB/100'	dB/100m
5742  NEC CMG CEC CMG	5742 is a dual version of 5740 with identical electrical characteristics				Black White Beige .300/7.62 by .617/15.7 wide						
5740F  NEC CMG CEC CM	20 AWG Stranded BC 10.1Ω/33.1Ω	Foam PE .180/4.57	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 6.7Ω/22.0Ω	Flame- retardant PVC .033/.84	Black .300/7.62	16.2 53.1	82%	75Ω	1 0.27 0.89 10 1.45 4.76 50 3.28 10.76 100 4.71 15.45 200 6.96 22.83 400 10.51 34.47 700 14.91 48.90 900 17.51 57.43 1000 18.73 61.43		
5741 Burial  NEC CMG CEC CM	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 5.3Ω/17.3Ω	PE with Floodant .033/.84	Black .300/7.62	16.2 53.1	82%	75Ω	1 0.26 0.85 10 0.81 2.62 50 1.46 4.79 100 2.05 6.72 200 2.83 9.28 400 4.05 13.28 700 5.60 18.37 900 6.23 20.43 1000 6.80 22.30		
5765  NEC CMR CEC CMR	18 AWG Solid BC 6.5Ω/21.3Ω	Foam PE .180/4.57	AL foil and 95% TC braid 2.0Ω/6.6Ω	Flame- retardant PVC .033/.838	Various colors .272/6.91	16.2 53.1	82%	75Ω	1 0.24 0.69 3.6 0.45 1.48 10 0.72 2.36 71.5 1.70 5.58 135 2.25 7.38 270 3.10 10.17 360 3.65 11.97 720 5.30 17.38 1000 6.20 20.34		
5796  NEC CMG CEC CM	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil and 60% AL braid 9.0Ω/29.5Ω	Flame- retardant PVC .030/.76	Black .272/6.9 by .575/14.6 wide	16.0 52.5	82%	75Ω	1 0.26 0.85 10 0.81 2.62 50 1.46 4.79 100 2.05 6.72 200 2.83 9.28 400 4.05 13.28 700 5.60 18.37 900 6.23 20.43 1000 6.80 22.30		




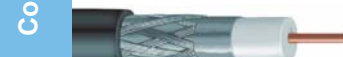


Specifications subject to change without notice.

Coax

Broadband Video/Video Distribution, MATV



75Ω Coax Cables, Series 11 Type





Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2285K Plenumax  NEC CEC CMP CMP	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam FEP .280/7.11	AL foil and 60% AL braid 6.9Ω/22.6Ω	PVDF(K) .020/.51	Cream .351/8.9	16.0	52.5	82%	75Ω	1	0.20	0.66
										10	0.45	1.48
										50	0.95	3.12
										100	1.35	4.43
										200	1.95	6.40
										400	3.02	9.91
										700	4.35	14.27
										900	5.19	17.02
										1000	5.59	18.34
2282K Plenumax  NEC CEC CMP CMP	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam FEP .280/7.11	AL foil and 60% AL braid 6.9Ω/22.6Ω	PVDF(K) .020/.51	Cream .351/8.9 by .732/18.6 wide	16.0	52.5	82%	75Ω	1	0.20	0.66
										10	0.45	1.48
										50	0.95	3.12
										100	1.35	4.43
										200	1.95	6.40
										400	3.02	9.91
										700	4.35	14.27
										900	5.19	17.02
										1000	5.59	18.34
2287K Plenumax  NEC CEC CMP CMP	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam FEP .280/7.11	Quad shield AL foil, 60% AL braid AL foil and 40% AL braid 3.7Ω/12.1Ω	PVDF(K) .020/.51	Cream .372/9.4	16.0	52.5	82%	75Ω	1	0.15	0.49
										10	0.47	1.54
										50	1.09	3.58
										100	1.59	5.22
										200	2.35	7.71
										400	3.52	11.55
										700	4.95	16.24
										900	5.79	18.99
										1000	6.19	20.30
5901  NEC CEC CM CMH	14 AWG Solid BC 2.4Ω/7.9Ω	Foam PE .280/7.11	AL foil and 60% TC braid 3.3Ω/10.9Ω	Flame- retardant PVC .045/1.10	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.18	0.59
										10	0.35	1.15
										50	0.81	2.66
										100	1.14	3.74
										200	1.63	5.35
										400	2.35	7.71
										700	3.20	10.50
										900	3.63	11.91
										1000	3.83	12.56
5910 w/0.072" Messenger Aerial  Outdoor	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 60% AL braid 6.9Ω/22.6Ω	Flame- retardant PVC .042/1.07	Black .395/10.03 by .472/1.55 wide	16.2	53.1	85%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.84	6.04
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83
5912R  NEC CATVR	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 60% AL braid 6.9Ω/22.6Ω	Flame- retardant PVC .042/1.07	Black .395/10.03	16.2	53.1	87%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.84	6.04
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Broadband Video/Video Distribution, MATV




75Ω Coax Cables, Series 11 Type

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5913  NEC CM CEC CMG	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 60% AL braid 7.1Ω/23.3Ω	Flame- retardant PVC .045/1.1	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.84	6.04
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83
5914 Burial  Outdoor	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil, 60% AL braid 6.9Ω/22.6Ω	PE with Floordant .045/1.1	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.84	6.04
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83
5915  NEC CL2 CATV	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 90% AL braid 4.8Ω/15.7Ω	Flame- retardant PVC .045/1.1	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.84	6.04
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83
5940  NEC CM CEC CMH	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 3.7Ω/12.1Ω	Flame- retardant PVC .035/.89	Black .405/10.3	16.2	53.1	84%	75Ω	1	0.22	0.72
										10	0.49	1.61
										50	0.98	3.21
										100	1.29	4.23
										200	1.78	5.84
										400	2.68	8.79
										700	3.67	12.04
										900	4.25	13.94
										1000	4.52	14.83

Specifications subject to change without notice.

Broadband Video/Video Distribution, MATV

75Ω Coax Cables, Trunk

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2312K Plenum Trunk Plenumax  NEC CMP CEC CMP	.109/2.76 Solid CCA 1.3Ω/4.26Ω	Foam FEP .450/11.4	AL sheath .40Ω/1.3Ω	PVDF(K) .012/.31	Cream .524/13.3	16.0	52.5	86%	75Ω	1	0.07	0.23
										10	0.23	0.75
										50	0.56	1.84
										100	0.83	2.72
										200	1.25	4.10
										400	1.97	6.46
										700	2.92	9.58
										900	3.47	11.38
										1000	3.78	12.40








Specifications subject to change without notice.

Plenumax is a trademark for CommScope plenum products.

Series 6 Satellite

for plenum and non-plenum applications swept - tested to 2.2 GHz



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation										
						pF/ft	pF/m			MHz	dB/100'	dB/100m								
0132V Plenumax  NEC CEC CMP CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil and 60% AL braid 9.0Ω/29.5Ω	CommFlex® .016/.41	Black White .237/6.0	15.8	51.8	84%	75Ω	1	0.24	0.79								
										10	0.75	2.46								
										50	1.46	4.79								
										100	2.06	6.76								
										200	2.97	9.74								
										400	5.00	16.40								
										700	6.61	21.68								
										900	7.50	24.60								
										1000	7.91	25.94								
										1450	8.60	33.46								
0359V Plenumax  NEC CEC CMP CMP	0359 is a dual cable version of 0132 with identical electrical characteristics				White .237/6.0 by .604/15.3 wide					1800	11.50	37.72								
										2200	12.70	41.66								
0461  NEC CEC CM CMG	18 AWG Solid BC 6.5Ω/21.3Ω	Foam PE .180/4.57	AL foil and 60% AL braid 10.5Ω/34.4Ω	Flame-retardant PVC .030/.76	Black .272/6.9 by .575/14.6 wide	16.2	53.1	82%	75Ω	1	.26	.85								
										10	.76	2.49								
										50	1.46	4.79								
										100	2.05	6.72								
										200	2.83	9.28								
										400	4.05	13.28								
										700	5.60	18.37								
										900	6.23	20.43								
										1000	6.59	21.62								
										1200	7.50	24.60								
0467  NEC CEC CM CMG	0467 has the same electrical characteristics as 0461 with a 17 AWG CCS ground wire				Black .272/6.9 by .730/18.5 wide					1450	8.04	26.37								
										1800	8.50	27.88								
										2200	9.00	29.52								
5725  NEC CEC CM CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil and 40% AL braid 14.9Ω/48.9Ω	Flame-retardant PVC .030/.76	Black White Grey .272/6.9	16.0	52.5	82%	75Ω	1	0.26	0.85								
										10	0.76	2.66								
										50	1.46	4.79								
										100	2.05	6.72								
										200	2.83	9.28								
										400	4.05	13.28								
										700	5.60	18.37								
										900	6.23	20.43								
										1000	6.59	21.62								
										1200	7.50	24.60								
5729  NEC CEC CM CMG	18 AWG Solid BC 6.5Ω/21.3Ω				Foam PE .180/4.57	AL foil and 60% AL braid 10.5Ω/34.4Ω	Flame-retardant PVC .030/.76	Black White Grey .272/6.9	16.2	53.1	82%	75Ω	1	0.26	0.85					
													10	0.76	2.49					
													50	1.46	4.79					
													100	2.05	6.72					
													200	2.83	9.28					
													400	4.05	13.28					
													700	5.60	18.37					
													900	6.23	20.43					
													1000	6.59	21.62					
													1200	7.50	24.60					
5731  NEC CEC CM CMG	5731 has the same electrical characteristics as 5729 with a 17 AWG CCS ground wire							Black White Grey .272/6.9 by .427/10.8 wide					1450	8.04	26.37					
													1800	8.50	27.88					
													2200	9.00	29.52					

Specifications subject to change without notice.

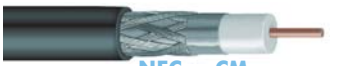

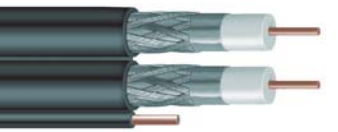

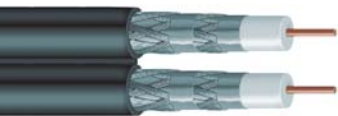


CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

Plenumax is a trademark for CommScope plenum products.

Series 6 Satellite

for plenum and non-plenum applications swept-tested to 2.2 GHz



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation																																																																																								
						pF/ft	pF/m			MHz	dB/100'	dB/100m																																																																																						
5730  NEC CEC CM CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid 9.0Ω/29.5Ω	Flame- retardant PVC .030/.76	Black White Grey Beige .272/6.9	16.2	53.1	82%	75Ω	1	0.25	0.82																																																																																						
5786  NEC CEC CM CMH	5786 is a dual cable version of 5730 with identical electrical characteristics				Black White Grey .272/6.9 by .575/14.6 wide					10	0.81	2.66																																																																																						
										50	1.79	5.87																																																																																						
										100	2.05	6.72																																																																																						
										200	2.83	9.28																																																																																						
										400	4.05	13.28																																																																																						
										700	5.60	18.37																																																																																						
										900	6.23	20.43																																																																																						
										1000	6.59	21.62																																																																																						
										1200	7.50	24.60																																																																																						
										1450	8.04	26.37																																																																																						
1800	8.80	28.86																																																																																																
2200	9.70	31.81																																																																																																
5788  NEC CEC CM CMH	5788 is a dual cable version of 5730 with identical electrical characteristics and a 17 AWG CCS ground wire				Black .272/6.9 by .730/18.5 wide																																																																																													
5740 Quad Shield  NEC CEC CMG CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Quad shield AL foil, 60% AL braid, AL foil, 40% AL braid 5.3Ω/17.3Ω	Flame- retardant PVC .033/.84	Black White Beige .300/7.62	16.0	52.5	82%	75Ω	1	0.26	0.85																																																																																						
											10	0.81	2.66																																																																																					
											50	1.46	4.79																																																																																					
											100	2.05	6.72																																																																																					
											200	2.83	9.28																																																																																					
											400	4.05	13.28																																																																																					
											700	5.60	18.37																																																																																					
											900	6.23	20.43																																																																																					
											1000	6.59	21.62																																																																																					
											1200	7.22	23.68																																																																																					
5742 Quad Shield  NEC CEC CMG CMG	5742 is a dual cable version of 5740 with identical electrical characteristics and				Black White Beige .300/7.62 by .630/16.0 wide																																																																																													
5781 Quad Shield  NEC CEC CM CMH	18 AWG Solid BC 6.5Ω/21.3Ω	Foam PE .180/4.57	Quad shield AL foil, 60% AL braid, AL foil, 40% AL braid 5.3Ω/17.4Ω	Flame- retardant PVC .033/.83	Black White .300/7.6	16.2	53.1	82%	75Ω	1	0.26	0.85																																																																																						
											10	0.76	2.49																																																																																					
											50	1.46	4.79																																																																																					
											100	2.05	6.72																																																																																					
											200	2.83	9.28																																																																																					
											400	4.05	13.28																																																																																					
											700	5.60	18.37																																																																																					
											900	6.23	20.43																																																																																					
											1000	6.59	21.62																																																																																					
											1200	7.50	24.60																																																																																					
5782 Quad Shield  NEC CEC CM CMH	5782 is a dual cable version of 5781 with identical electrical characteristics and				Black White .300/7.6 by .630/16.0 wide																																																																																													



Specifications subject to change without notice.

CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

Series 6 Satellite

for plenum and non-plenum applications swept - tested to 2.2 GHz



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance pF/ft pF/m		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation MHz dB/100' dB/100m				
5787 Burial 	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil and 60% AL braid 9.0Ω/29.5Ω	PE .272/6.91	Black .272/6.91 by .585/14.9 wide	16.2	53.1	82%	75Ω	1	0.25	0.82		
										10	0.81	2.66		
										50	1.79	5.87		
										100	2.05	6.72		
										200	2.83	9.28		
										400	4.05	13.28		
										700	5.60	18.37		
										900	6.23	20.43		
										1000	6.59	21.62		
										5789 Burial 	5789 is a version of 5787 with identical electrical characteristics and a 17 AWG CCS ground wire			
1450	8.04			26.37										
1800	8.80			28.86										
2200	9.70			31.81										





Specifications subject to change without notice.

CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

Series 11 Satellite

for non-plenum applications swept - tested to 2.2 GHz

Coax

Code	Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
							pF/ft	pF/m			MHz	dB/100'	dB/100m
	5916	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 60% AL braid 7.1Ω/23.3Ω	Flame- retardant PVC .045/1.1	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.22	0.72
	NEC CEC	CM CMH									10	0.49	1.61
											50	0.98	3.21
											100	1.29	4.23
											200	1.84	6.04
											400	2.68	8.79
											700	3.67	12.04
											900	4.25	13.94
											1000	4.52	14.83
											1200	4.91	16.10
	5916R	5916R is a riser-rated version of 5916 with identical electrical characteristics				Black .405/10.3					1450	5.39	17.68
	NEC CEC	CMR CMR									1800	6.01	19.71
											2200	6.64	21.78
	5917 Burial	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	AL foil and 60% AL braid 6.9Ω/22.6Ω	PE with Flooding .042/1.1	Black .405/10.3	16.2	53.1	82%	75Ω			
	NEC CEC												
	5918	5918 is a dual cable version of 5916 with identical electrical characteristics				Black .405/10.3 by .840/21.3							
	NEC CEC												



Specifications subject to change without notice.

CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

Series 59 Satellite

for non-plenum applications swept - tested to 2.2 GHz






Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5575 RG59  NEC CEC CM CMH	20 AWG Solid CCS 47.0Ω/154Ω	Foam PE .144/3.66	AL foil and 67% AL braid 10.5Ω/34.4Ω	Flame- retardant PVC .032/.81	Black .242/6.1	16.2	53.1	82%	75Ω	1	0.26	0.85
										10	0.81	2.66
										50	1.74	5.71
										100	2.40	7.87
										200	3.34	10.96
										400	4.78	15.68
										700	6.42	21.06
										900	7.30	23.94
										1000	7.69	25.22
										1200	8.43	27.65
										1450	9.27	30.41
										1800	10.32	33.85
										2200	11.40	37.39
5586 RG59  NEC CEC CM CMH	5586 is a dual cable version of 5575 with identical electrical characteristics				Black .242/6.1 by .510/12.9 wide							

Specifications subject to change without notice.

CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

VSAT Types I, II and III 50Ω

for plenum applications

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2125K Type I  NEC CEC CMP CMP	19 AWG Solid BC 8.5Ω/27.9Ω	Solid FEP .116/2.95	96% BC braid and 96% BC braid 2.5Ω/8.2Ω	PVDF .020/.51	Cream .194/4.9	30.0	98.4	66%	50Ω	500	9.73	31.91
										1000	14.53	47.66
										1300	16.80	55.10
										1800	21.50	70.52
2426K Type II  NEC CEC CMP CMP	10 AWG Solid BC .92Ω/3.02Ω	Foam FEP .285/7.24	90% BC braid 3.4Ω/11.2Ω	PVDF .020/.51	Cream .355/9.0	24.0	78.7	84%	50Ω	500	5.99	19.65
										1000	9.36	30.70
										1300	11.27	36.97
										1800	13.94	45.72
2427K Type III  NEC CEC CMP CMP	10 AWG Solid BC .92Ω/3.02Ω	Foam FEP .285/7.24	AL foil and 90% TC braid, 1.4Ω/4.6Ω	PVDF .016/.41	Cream .355/9.0	24.0	78.7	84%	50Ω	500	3.80	12.46
										900	5.10	16.73
										1000	5.90	19.35
										1300	7.00	22.96
										1800	8.50	27.88

CommScope manufactures custom products for Hughes Network Systems (HNS)

Specifications subject to change without notice.

VSAT Types I, II and III 50Ω

for non-plenum applications






Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
7725 Type I	19 AWG Solid BC 8.5Ω/27.9Ω	Solid PE .118/2.99	96% BC braid and 96% BC braid 2.4Ω/7.9Ω	PE .029/.74	Black .212/5.4	30.8	101	66%	50Ω	500	11.0	36.08
										1000	16.2	53.14
										1300	18.5	60.68
										1800	23.0	75.44
For Outdoor												
7726 Type I	19 AWG Solid BC 8.5Ω/27.9Ω	Solid PE .118/2.99	96% BC braid and 96% BC braid 2.4Ω/7.9Ω	PVC .029/.74	Black .212/5.4	30.8	101	66%	50Ω	500	11.0	36.08
										1000	16.2	53.14
										1300	18.5	60.68
										1800	23.0	75.44
NEC CL2												
3222 Type II	10 AWG Solid BC .92Ω/3.02Ω	Foam PE .288/7.31	90% BC braid 3.0Ω/9.8Ω	PE with floodant .048/1.2	Black .405/10.3	23.5	77.1	84%	50Ω	500	5.00	16.40
										1000	7.25	23.78
										1300	8.10	26.57
										1800	9.65	31.65
For Burial												
3226 Type II	10 AWG Solid BC .92Ω/3.02Ω	Foam PE .288/7.31	90% BC braid 3.0Ω/9.8Ω	PE .048/1.2	Black .405/10.3	23.5	77.1	84%	50Ω	500	5.00	16.40
										1000	7.25	23.78
										1300	8.10	26.57
										1800	9.65	31.65
For Outdoor												
3228 Type II	10 AWG Solid BC .92Ω/3.02Ω	Foam PE .288/7.31	90% BC braid 3.0Ω/9.8Ω	PVC .048/1.2	Black .405/10.3	23.5	77.1	84%	50Ω	500	5.00	16.40
										1000	7.25	23.78
										1300	8.10	26.57
										1800	9.65	31.65
NEC CEC CM CMH												
3227 Type III	10 AWG Solid BC .92Ω/3.02Ω	Foam PE .288/7.31	AL foil and 90% TC braid 1.4Ω/4.6Ω	PE .045/1.1	Black .405/10.3	23.5	77.1	84%	50Ω	500	3.00	9.84
										1000	4.25	13.94
										1300	5.10	16.73
										1800	6.05	19.84
For Outdoor												
3229 Type III	10 AWG Solid BC .92Ω/3.02Ω	Foam PE .288/7.31	AL foil and 90% TC braid 1.4Ω/4.6Ω	PVC .045/1.1	Black .405/10.3	23.5	77.1	84%	50Ω	500	3.00	9.84
										1000	4.25	13.94
										1300	5.10	16.73
										1800	6.05	19.84
NEC CEC CM CMG												

Specifications subject to change without notice.

Series 6 DSS/Commercial 75Ω for Plenum Applications






Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
0132V Plenumax  NEC CMP CEC CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil and 60% AL Braid 9.0Ω/29.5Ω	CommFlex(V) .016/.41	Black White .237/6.0	15.8	51.8	84%	75Ω	1	0.24	.79
										10	0.75	2.46
										50	1.46	4.79
										100	2.06	6.76
										200	2.97	9.74
										400	5.00	16.40
										700	6.61	21.69
										900	7.50	24.61
										1000	7.91	25.95
										1450	10.20	33.46
										1800	11.50	37.73
										2200	12.70	41.67
0359V Plenumax  NEC CMP CEC CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil and 60% AL Braid 9.0Ω/29.5Ω	CommFlex(V) .016/.41	White .237/6.02 by .604/15.3 wide	16.0	52.5	84%	75Ω	1	0.37	1.21
										10	0.95	3.12
										50	2.01	6.59
										100	2.72	8.92
										200	3.80	12.46
										400	5.40	17.71
										700	7.00	22.96
										900	8.05	26.40
										1000	8.60	28.21
2227V Quad Shield Plenumax  NEC CMP CEC CMP	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	Quad shield AL foil, 60% AL braid, AL foil and 40% AL braid 5.3Ω/17.4Ω	CommFlex(V) 0.15/.41	White .264/6.7	16.0	52.5	84%	75Ω	1	0.37	1.21
										10	0.95	3.12
										50	2.01	6.59
										100	2.72	8.92
										200	3.80	12.46
										400	5.40	17.71
										700	7.00	22.96
										900	8.05	26.40
										1000	8.60	28.21

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Quad Shield Products for Video & Data/Voice



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
0490 Quad Shield  NEC CEC CMR CMR	24 AWG Solid Copper	Foam PE .180/4.57		Flame- retardant PVC 0.25/.64	Black .210/5.3	16.0	52.5	72%	100Ω ±15Ω	1	.26	.84
	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Quad Shield AL foil, 60% AL braid, AL foil, 40% AL braid 5.3Ω/17.3Ω	Flame- retardant PVC .033/.84	Black .300/7.62	16.0	52.5	82%	75Ω	10	.81	2.66
										50	1.46	4.79
										100	2.05	6.73
										200	2.83	9.29
										400	4.05	13.29
										700	5.60	18.37
										900	6.23	20.44
										1000	6.59	21.62
										1200	7.50	24.60
0491 Quad Shield  NEC CEC CMR CMR	24 AWG Solid Copper	Foam PE .180/4.57		Flame- retardant PVC .025/.64	Black .210/5.3	16.0	52.5	72%	100Ω ±15Ω	1	.26	.84
	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Quad Shield AL foil, 60% AL braid, AL foil, 40% AL braid 5.3Ω/17.3Ω	Flame- retardant PVC .033/.84	Black .300/7.62	16.0	52.5	82%	75Ω	10	.81	2.66
										50	1.46	4.79
										100	2.05	6.73
										200	2.83	9.29
										400	4.05	13.29
										700	5.60	18.37
										900	6.23	20.44
										1000	6.59	21.62
										1200	7.50	24.60
5740 Quad Shield  NEC CEC CMG CMG	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Quad Shield AL foil 60% AL braid, AL foil, 40% AL braid 5.3Ω/17.3Ω	Flame- retardant PVC .033/.84	Black White Beige .300/7.62	16.0	52.5	82%	75Ω	1450	8.04	26.37
										1800	8.80	28.86
										2200	9.70	31.81





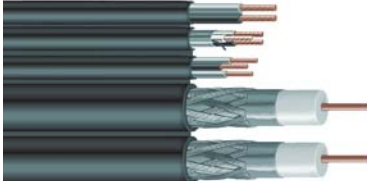
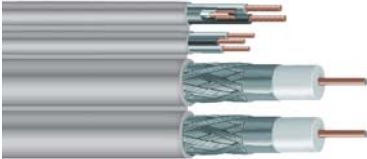
Specifications subject to change without notice.

CommScope satellite products are swept tested to 2200 MHz with a structural return loss of 20 dB from 950 to 2200 MHz.

TVRO Satellite Flat Style

for buried applications/swept - tested to 2.2 GHz (2200 MHz)



Part Number Description	Coax Cable Conductor Nom DCR kft / km	Rotor Cable Type & Size Nom DCR kft / km	Actuator Cable Type & Size Nom DCR kft / km	Power cable Type & Size Nom DCR kft / km	Overall Jacket Type, Color & Dimensions in / mm.	RG6 Coax Electrical Characteristics (measured at 68°F/21°C)
0458 	Dual Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 60% AL braid	None	One pair 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω PE insulation	None	Black PVC .272 x .811/ 6.9 x 20.6	Attenuation: MHz dB/100' dB/100m 1 0.25 0.82 10 0.81 2.66 50 1.79 5.87 100 2.05 6.72 200 2.83 9.28 400 4.05 13.28 700 5.60 18.37 900 6.23 20.43 1000 6.59 21.62 1200 7.50 24.60 1450 8.04 26.37 1800 8.80 28.86 2200 9.70 31.81 SRL: 15 dB min. Nominal capacitance: 16.2 pF/ft 53.1 pF/m Nom. velocity of prop: 82% Nominal impedance: 75Ω <i>*Note: The following products have identical electrical characteristics:</i>
8060 	Single Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 40% AL braid	None	Two 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω Foil shield w/ 24 AWG TC drain wire PE insulation	Two 16 AWG (7x0.0191) Stranded BC 3.7Ω/12.1Ω PVC insulation (Actuator and rotor cables are jacketed together)	Black PVC .272 x .581/ 6.9 x 14.6	
8126 	Single Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 40% AL braid	Three 20 AWG (7x28 AWG) Stranded BC 9.9Ω/32.5Ω PE insulation	Three 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω Foil shield w/ 24 AWG TC drain wire PE insulation	Two 16 AWG (7x0.0191) Stranded BC 3.7Ω/12.1Ω PVC insulation (Actuator and rotor cables are jacketed together)	Black PVC .272 x 1.13/ 6.9 x 28.7	
8136 	Dual Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 40% AL braid	Three 20 AWG (7x28 AWG) Stranded BC 9.9Ω/32.5Ω PE insulation	Three 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω Foil shield w/ 24 AWG TC drain wire PE insulation	Two 16 AWG (7x0.0191) Stranded BC 3.7Ω/12.1Ω PVC insulation (Actuator and rotor cables are jacketed together)	Black PVC .272 x 1.13/ 6.9 x 28.7	
8530 	Dual Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 60% AL braid	Three 20 AWG (7x28 AWG) Stranded BC 9.9Ω/32.5Ω Foil shield w/ 24 AWG TC drain wire PE insulation	Three 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω Foil shield w/ 24 AWG TC drain wire PE insulation	Two 14 AWG (7x0.0242) Stranded BC 2.5Ω/8.2Ω PVC insulation	Black PVC .272 x 1.46/ 6.9 x 37.1	
8236 Plenumax 	Dual Series 6 18 AWG Solid CCS 28.6Ω/93.8Ω Shields: AL foil and 60% AL braid	Three 20 AWG (7x28 AWG) Stranded BC 9.9Ω/32.5Ω FEP insulation	Three 22 AWG (7x30 AWG) Stranded BC 15.7Ω/51.5Ω Foil shield w/ 24 AWG TC drain wire FEP insulation	Two 16 AWG (7x0.0201) Stranded BC 3.7Ω/12.1Ω FEP insulation (Actuator and rotor cables are jacketed together)	Grey .272 x 1.13/ 6.9 x 28.7	10 0.80 2.62 100 2.10 6.89 950 6.54 21.45 1000 6.80 22.30 1200 7.45 24.43 1450 8.40 27.55 1800 9.36 30.70 SRL: 15 dB min. Nominal capacitance: 16.2 pF/ft 53.1 pF/m Nom. velocity of prop: 84% Nominal impedance: 75Ω

Rotor Cables for 8126, 8136, 8530, and 8236 are black, white, & red

Actuator Cables colors
 0458: blue, white, blue
 8060: orange, green
 8126: green, brown, orange
 8136: green, brown, orange
 8530: green, brown, orange
 8236: green, brown, orange

Power Cables for 8060, 8126, 8136, 8530, and 8236 are white & red



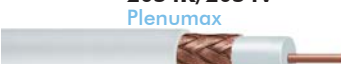



Plenumax is a trademark for CommScope plenum products.

For information, call Corporate 800.982.1708, Customer Service 800.544.1948, Fax 828.459.5099 or go to www.commscope.com

Security

75Ω Coax Cables, Series 59 Type



Part Number Safety Rating		Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance pF/ft pF/m		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation MHz dB/100' dB/100m		
 2037V Plenumax NEC CEC CMP CMP	20 AWG Solid BC 10.5Ω/34.4Ω	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	CommFlex(V) .016/.41	White .193/4.9	16.0 52.5	84%	75Ω	1	0.24	0.79		
									10	0.85	2.79		
									100	2.92	9.25		
									400	6.27	20.57		
									700	8.92	29.26		
									900	10.60	34.77		
									1000	11.49	37.69		
 2039V Plenumax NEC CEC CMP CMP	20 AWG Solid CCS 47.0Ω/154Ω	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	CommFlex(V) .016/.41	White .193/4.9	16.0 52.5	84%	75Ω	1	0.24	0.79		
									10	0.85	2.79		
									100	2.92	9.25		
									400	6.27	20.57		
									700	8.92	29.26		
									900	10.60	34.77		
									1000	11.49	37.69		
 2054K/2054V Plenumax NEC CEC CMP CMP	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG pair (7x26) BC	Foam FEP .135/3.43	95% BC Braid 2.7Ω/8.9Ω	PVDF(K) .015/.38 CommFlex(V) .016/.41	White Cream .193/4.9 by .386/9.8 wide	16.0 52.5	84%	75Ω	1	0.24	0.79		
				10					0.85	2.79			
				100					2.92	9.25			
				400					6.27	20.57			
				700					8.92	29.26			
				900					10.60	34.77			
				1000					11.49	37.69			
 5553 NEC CEC CM CMH	20 AWG Solid BC 10.5Ω/34.4Ω	Foam PE .144/3.66	95% BC Braid 2.7Ω/8.9Ω	Flame- retardant PVC .034/.86	Black, white or gray .242/6.1	16.2 53.2	82%	75Ω	1	0.20	0.65		
									10	0.82	2.69		
									100	2.62	8.59		
									400	5.45	17.88		
									700	7.52	24.67		
									900	8.60	28.21		
									1000	9.29	30.47		
 5554 NEC CEC CM CMG	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG Pair (7x26) BC	Foam PE .146/3.71	95% BC Braid 2.7Ω/8.9Ω	Flame- retardant PVC .032/.81	Black .242/6.1 by .484/12.3 wide	16.2 53.2	82%	75Ω	1	0.20	0.65		
									10	0.82	2.69		
									100	2.62	8.59		
									400	5.45	17.88		
									700	7.52	24.67		
									900	8.60	28.21		
									1000	9.29	30.47		
 5554M NEC CL2	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG Pair (7x26) BC	Foam PE .146/3.71	95% BC Braid 2.7Ω/8.9Ω	Flame- retardant PVC .032/.81	Black .242/6.1 by .484/12.3 wide	16.2 53.2	82%	75Ω	1	0.24	0.79		
									10	0.76	2.50		
									50	1.80	5.91		
									100	2.60	8.53		
									200	3.80	12.47		
									400	5.37	17.62		
									700	7.11	23.32		
									900	8.40	27.56		
									1000	8.80	28.87		

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2284K Plenumax NEC CMP CEC CMP	14 AWG Solid BC 2.4Ω/7.9Ω	Foam FEP .280/7.11	AL foil and 60% AL Braid 2.7Ω/8.9Ω	PVDF(K) .020/.51	Cream .351/8.9	16.0	52.5	84%	75Ω	1	0.25	0.82
										10	0.45	1.46
										100	1.38	4.51
										400	3.14	10.29
										700	4.95	16.24
										900	5.90	19.35
										1000	6.49	21.29
5903 For Outdoor	14 AWG Solid BC 2.4Ω/7.9Ω	Foam FEP .285/7.2	93% BC Braid 2.5Ω/8.2Ω	PE .045/1.14	Black .405/10.3	16.2	53.1	82%	75Ω	1	0.17	0.56
										10	0.46	1.51
										50	0.93	3.05
										100	1.45	4.76
										200	1.83	6.01
										400	2.78	9.12
										700	4.06	13.32
										900	4.66	15.29
										1000	4.82	15.81

Specifications subject to change without notice.
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Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2277V Plenumax NEC CMP CEC CMP	18 AWG Solid BC 6.5Ω/21.3Ω	Foam FEP .170/4.32	95% BC Braid 2.0Ω/6.6Ω	CommFlex(V) .016/.41	White .237/6.0	16.0	52.5	84%	75Ω	1	0.21	0.69
										10	0.65	2.13
										100	2.04	6.69
										400	4.46	14.63
										700	5.89	19.32
										900	7.47	24.50
										1000	8.02	26.31
5654 NEC CM CEC CMG	18 AWG Solid BC 6.5Ω/21.3Ω and 18 AWG pair (7x26)BC	Foam PE .180/4.57	95% BC Braid 2.0Ω/6.6Ω	Flame- retardant PVC .035/.89	Black .272/6.9 by .484/12.3 wide	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.80	2.62
										100	2.10	6.89
										400	4.55	14.93
										700	6.23	20.43
										900	7.23	23.71
										1000	6.80	22.30
5700 NEC CM CEC CMH	18 AWG Solid BC 6.5Ω/21.3Ω	Foam PE .180/4.57	95% BC Braid 2.0Ω/6.6Ω	Flame- retardant PVC .035/.89	Black .272/6.9	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.65	2.14
										100	2.16	7.09
										400	4.55	14.93
										700	6.23	20.43
										900	7.23	23.71
										1000	7.75	25.42

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

MAP Manufacturing Automation Protocol

75Ω Coax Cables, Series 11 Type



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5950  NEC CEC CMR CMH	14 AWG Solid CCS 12.0Ω/39.4Ω	Foam PE .280/7.11	Quad shield AL foil, 40% AL braid, AL foil and 60% AL braid 3.7Ω/12.1Ω	Flame- retardant PVC .035/.89	Black .405/10.3	16.0	52.5	82%	75Ω	1	0.18	0.59
										10	0.35	1.15
										50	0.81	2.64
										100	1.14	3.75
										200	1.63	5.35
										400	2.35	7.70
										700	3.20	10.51
										900	3.63	11.92
										1000	3.83	12.56






Specifications subject to change without notice.

Coax

Broadcast

75Ω High Performance RGB, Miniature Low Loss



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
203505 RGBSC 	(5) Five 26 AWG SC 41.0Ω/134.5Ω	Foam FEP .077/1.96	AL foil and 93% TC braid 6.0Ω/19.7Ω	PVDF .013/.330 Bundle jacket is CommFlex(V) .018/.46	White .378/9.6 Component 2035 cables are red, green, blue, black and white	17.5	57.4	78%	75Ω	1	0.51	1.67
										3.6	0.97	4.25
753603 RGB 	(3) Three 25 AWG Stranded BC (7x0.007") 30Ω/98.4Ω	Foam PE .099/2.51	TC 93% braid 6.0Ω/19.7Ω	Flame- retardant PVC .016/.41 Bundle jacket is TPE .040/1.0	Black .385/9.8 Component 7536 cables are red, green and blue	17.3	56.8	78%	75Ω	10	1.44	4.72
										71.5	4.02	13.19
753604 RGBS 	(4) Four 25 AWG Stranded BC (7x0.007") 30Ω/98.4Ω	Foam PE .099/2.51	TC 93% braid 6.0Ω/19.7Ω	Flame- retardant PVC .016/.41 Bundle jacket is TPE .040/1.0	Black .435/11.0 Component 7536 cables are red, green, blue and black	17.3	56.8	78%	75Ω	135	5.53	18.14
										270	7.82	25.65
753605 RGBSC 	(5) Five 25 AWG Stranded BC (7x0.007") 30Ω/98.4Ω	Foam PE .099/2.51	TC 93% braid 6.0Ω/19.7Ω	Flame- retardant PVC .016/.41 Bundle jacket is TPE .054/1.4	Black .508/12.9 Component 7536 cables are red, green, blue, black and white	17.3	56.8	78%	75Ω	360	9.03	29.62
										720	12.77	41.89
7538 Miniature Low-loss 	23 AWG Solid BC 20.3Ω/66.6Ω	Foam PE .100/2.51	AL foil and TC 95% braid 2.7Ω/8.9Ω	Flame- retardant PVC .014/.35	Black .159/4.0	16.5	54.1	84%	75Ω	1000	15.05	49.36
										1000	15.05	49.36



Specifications subject to change without notice.

Coax

Broadcast

75Ω Coax Cables, Precision Digital Video





Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
7501 	20 AWG Solid BC 11Ω/36.1Ω	Solid PE .198/5.03	TC 98% braid and TC 96% braid 1.1Ω/3.5Ω	PE .025/.64	Black .304/7.7	21.0	68.7	66%	75Ω	1	0.25	0.82
										10	0.78	2.56
										50	1.91	6.26
										100	2.70	8.86
										200	3.82	12.52
										400	5.40	17.71
										700	7.14	23.43
										900	8.10	26.57
										1000	8.54	28.01
7505 	20 AWG Solid BC 11Ω/36.1Ω	Solid Flame- retardant PE .200/5.08	AL Foil and TC 96% braid 1.1Ω/3.5Ω	PVC .035/.89	Black .305/7.7	21.0	68.7	66%	75Ω	1	0.28	0.92
										10	0.85	2.78
										50	1.76	5.79
										100	2.41	7.91
										200	3.42	11.22
										400	5.03	16.52
										700	6.79	22.30
										900	7.71	25.29
										1000	8.32	27.29

Specifications subject to change without notice.

Broadcast

75Ω Coax Cables, HDTV Video

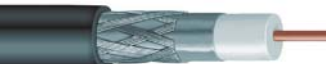

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2065V Plenumax 	20 AWG Solid BC 10.5Ω/34.4Ω	Foam FEP .135/3.43	AL foil and TC 96% braid 3.2Ω/10.5Ω	CommFlex(V) .016/.41	White .207/5.3	16.1	53.0	84%	75Ω	1	0.29	0.95
										3.6	0.55	1.80
										10	1.05	3.44
										71.5	2.33	7.64
										135	3.14	10.30
										270	4.80	15.74
										360	5.22	17.12
										720	7.30	23.94
										1000	9.40	30.83
2279V Plenumax 	18 AWG Solid BC 6.5Ω/21.3Ω	Foam FEP .170/4.32	AL foil and TC 95% braid 2.8Ω/9.3Ω	CommFlex(V) .015/.41	White .237/6.0	15.8	51.9	84%	75Ω	1	0.21	0.69
										3.6	0.40	1.31
										10	0.65	2.13
										71.5	1.75	5.74
										135	2.37	7.77
										270	3.46	11.35
										360	4.23	13.87
										720	5.97	19.58
										1000	6.20	20.34

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products

Broadcast

75Ω Coax Cables, HDTV Video




Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5565  NEC CMR CEC CMR	20 AWG Solid BC 10.5Ω/34.4Ω	Foam PE .146/3.71	AL foil and TC 95% braid 2.8Ω/9.18Ω	Flame- retardant PVC .030/.76	Black .242/6.1	16.2	53.1	82%	75Ω	1	0.25	0.82
										3.6	0.47	1.56
										10	0.79	2.59
										71.5	2.07	6.80
										135	2.85	9.35
										270	4.03	13.22
										360	4.65	15.27
										720	7.08	23.21
										1000	8.34	27.36
5765  NEC CMR CEC CMR	18 AWG Solid BC 6.5Ω/21.3Ω	Foam PE .180/4.57	AL foil and TC 95% braid 2.0Ω/6.6Ω	Flame- retardant PVC .033/.84	Black .272/6.9	16.2	53.1	82%	75Ω	1	0.24	0.79
										3.6	0.45	1.48
										10	0.72	2.36
										71.5	1.70	5.58
										135	2.25	7.38
										270	3.10	10.17
										360	3.65	11.97
										720	5.30	17.38
										1000	6.20	20.34

Specifications subject to change without notice.

Broadcast


75Ω Coax Cables, Series 7 Type

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
7530  NEC CM CEC CM	16AWG Solid BC 3.4Ω/11.2Ω	Foam PE .225/5.72	AL Foil and 95% TC braid 1.9W/3.20W	Flame- retardant PVC .030/.76	Black* .318/8.08	16.2	53.14	84%	75Ω	1	0.18	0.59
										3.6	0.36	1.18
										10	0.57	1.87
										71.5	1.35	4.43
										135	1.78	5.84
										270	2.48	8.13
										360	2.87	9.41
										720	4.19	13.74
										1000	4.96	16.27

Specifications subject to change without notice.

Broadcast

75Ω Coax Cables, Series 11 Type

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5906  NEC CMR CEC CMR	14 AWG Solid BC 2.4Ω/7.9Ω	Foam PE .285/7.24	AL Foil and 95% TC braid 1.5W/4.92W	Flame- retardant PVC .045/1.14	Black* .405/10.29	16.0	52.48	82%	75Ω	1	0.16	0.52
										3.6	0.30	0.98
										10	0.49	1.60
										71.5	1.12	3.67
										135	1.49	4.88
										270	2.10	6.88
										360	2.41	7.90
										720	3.48	11.41
										1000	4.30	14.10








Specifications subject to change without notice.

*Other colors available, upon request. Subject to minimum order.

Data Applications

50Ω Coax Cables, RG58 Type






Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2100V IEEE 802.3 Thinnet Plenumax  NEC CEC CMP CMP	20 AWG Solid BC 10.5Ω/34.4Ω	Solid FEP .107/2.71	95% TC braid 4.0Ω/13.1Ω	CommFlex(V) .015/.38	White .163/4.1	27.0	88.6	69.5%	50Ω	1	0.41	1.35
										10	1.30	4.27
										50	3.10	10.17
										100	4.10	13.45
										200	6.20	20.34
										400	9.50	31.17
										700	13.70	44.95
										900	14.50	47.57
										1000	15.50	50.86
2104V DEC 17-01246 Plenumax  NEC CEC CMP CMP	20 AWG Stranded TC (19x32) 10.2Ω/33.5Ω	Foam FEP .101/2.57	AL foil and 95% TC braid 4.2Ω/13.9Ω	CommFlex(V) .014/.36	White .161/4.1	27.0	88.6	78%	50Ω	1	0.43	1.41
										10	1.40	4.59
										50	3.13	10.27
										100	4.43	14.53
										200	6.26	20.53
										400	8.85	29.01
										700	11.71	38.41
										900	13.28	43.56
										1000	14.00	45.92
3104 DEC 17-01248  NEC CEC CMR CMG	20 AWG Stranded TC (19x32) 10.2Ω/33.3Ω	Foam PE .101/2.57	AL foil and 93% TC braid 4.2Ω/13.9Ω	Flame- retardant PVC .026/.66	White .183/4.6	25.0	82.0	78%	50Ω	5	0.99	3.24
										10	1.30	4.26
										50	2.90	9.51
										100	4.20	13.78
										200	6.10	20.00
										400	8.90	29.19
										700	12.10	39.69
										900	13.90	45.59
										1000	14.80	48.54
3130 IEEE 802.3 Thinnet  NEC CEC CM CMH	20 AWG Solid BC 10.5Ω/34.4Ω	Solid PE .116/2.95	95% TC braid 4.1Ω/13.5Ω	Flame- retardant PVC .030/.76	Black .195/4.9	28.5	93.5	66%	50Ω	1	0.44	1.44
										10	1.42	4.67
										50	3.10	10.17
										100	4.50	14.76
										200	6.80	22.31
										400	10.00	32.81
										700	14.00	45.93
										900	16.00	52.50
										1000	17.00	55.78
3135 IEEE 802.3 Thinnet  NEC CEC CM CMH	21 AWG Stranded TC (19x33) 10Ω/32.8Ω	Solid PE .116/2.95	95% TC braid 4.1Ω/13.5Ω	Flame- retardant PVC .030/.76	Black .195/4.9	30.5	100.0	66%	50Ω	1	0.64	2.11
										10	1.55	5.08
										50	4.54	14.91
										100	4.90	16.08
										200	9.09	29.81
										400	11.50	37.73
										700	17.00	55.73
										900	20.00	65.62
										1000	21.50	70.54
3136 IEEE 802.3 Thinnet Burial  Outdoor	20 AWG Stranded TC (19x32) 10Ω/32.8Ω	Solid PE .116/2.95	95% TC braid 4.1Ω/13.5Ω	PE with Floodant .027/.69	Black .195/4.9	30.5	100.0	66%	50Ω	1	0.64	2.11
										10	1.55	5.08
										50	4.54	14.91
										100	4.90	16.08
										200	9.09	29.81
										400	11.50	37.73
										700	17.00	55.73
										900	20.00	65.62
										1000	21.50	70.52
3139 IEEE 802.3 Thinnet  NEC CEC CM CMH	20 AWG Stranded TC (19x32) 8.6Ω/28.3Ω	Foam PE .114/2.90	95% TC braid 4.1Ω/13.5Ω	Flame- retardant PVC .030/.76	Black .195/4.9	26.0	85.3	78%	50Ω	1	0.45	1.48
										10	1.42	4.67
										50	3.20	10.50
										100	4.50	14.76
										200	6.40	21.00
										400	9.00	29.53
										700	12.00	39.37
										900	13.80	45.28
										1000	14.50	47.57

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Data Applications

50Ω Coax Cables, RG8 Type




Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance pF/ft pF/m		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation MHz dB/100' dB/100m		
3247 	13 AWG Stranded BC (7x21) 1.8Ω/6.1Ω	Solid PE .285/7.24	AL foil and 96% TC braid 1.2Ω/3.9Ω	Flame- retardant PVC .045/1.1	Black .410/10.4	29.5	96.8	66%	50Ω	1	0.23	0.74
										10	0.55	1.80
										50	1.60	5.25
										100	2.20	7.22
										200	3.20	10.50
										400	4.70	15.42
										700	6.90	22.64
NEC CL2	13 AWG Stranded BC (7x21) 1.87Ω/6.1Ω	Solid PE .285/7.24	AL foil and 96% TC braid 1.2Ω/3.9Ω	PVC .045/1.1	Black .405/10.3	29.5	96.8	66%	50Ω	900	8.00	26.25
										1000	8.90	29.20
3249 Appliance 	13 AWG Stranded BC (7x21) 1.87Ω/6.1Ω	Solid PE .285/7.24	AL foil and 96% TC braid 1.2Ω/3.9Ω	PVC .045/1.1	Black .405/10.3	29.5	96.8	66%	50Ω	1	0.17	0.56
										10	0.57	1.87
										50	1.20	3.94
										100	1.80	5.91
										200	2.70	8.86
										400	4.20	13.78
										700	5.80	19.03
AWM 1354	11 AWG Stranded BC (7x19) 1.2Ω/3.9Ω	Foam PE .285/7.24	Inner: 95% BC braid 1.1Ω/3.6Ω Outer: 95% BC braid 2.1Ω/6.9Ω	Inner: PE .030/.76 Outer: PE with Floodant .030/.76	Black .480/12.2	26.0	85.3	78%	50Ω	900	6.70	21.98
										1000	7.10	23.30
7815 Triaxial 	11 AWG Stranded BC (7x19) 1.2Ω/3.9Ω	Foam PE .285/7.24	Inner: 95% BC braid 1.1Ω/3.6Ω Outer: 95% BC braid 2.1Ω/6.9Ω	Inner: PE .030/.76 Outer: PE with Floodant .030/.76	Black .480/12.2	26.0	85.3	78%	50Ω	1	0.17	0.56
										10	0.57	1.87
										50	1.20	3.94
										100	1.80	5.91
										200	2.70	8.86
										400	4.20	13.78
										700	5.80	19.03
Outdoor/Flooded	11 AWG Stranded BC (7x19) 1.2Ω/3.9Ω	Foam PE .285/7.24	Inner: 95% BC braid 1.1Ω/3.6Ω Outer: 95% BC braid 2.1Ω/6.9Ω	Inner: PE .030/.76 Outer: PE with Floodant .030/.76	Black .480/12.2	26.0	85.3	78%	50Ω	900	6.70	21.98
										1000	7.10	23.30

Specifications subject to change without notice.

Coax

Data Applications

50Ω Coax Cables, RG213 Type

Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
7713 Appliance  AWM 1354	13 AWG Stranded BC (7x21) 2.0Ω/6.6Ω	Solid PE .285/7.24	95% BC braid 1.2Ω/3.9Ω	Flame- retardant PVC .045/1.1	Black .405/10.3	30.8	101.0	66%	50Ω	1	0.18	0.59
										10	0.62	2.03
										50	1.50	4.92
										100	2.10	6.89
										200	3.00	9.84
										400	4.80	15.75
										700	6.50	21.33
										900	7.60	24.94
										1000	9.20	30.18

Specifications subject to change without notice.

Data Applications

50Ω Coax Cables, RG214 Type



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
7714 Appliance AWM 1354	13 AWG Stranded SC (7x21) 1.7Ω/5.7Ω	Solid PE .285/7.24	95% SC braid and 95% SC braid 0.8Ω/2.6Ω	Flame- retardant PVC .040/1.0	Black .425/10.8	30.8	101.1	66%	50Ω	1	0.17	0.56
										10	0.66	2.16
										50	1.30	4.27
										100	1.90	6.23
										200	2.70	8.86
										400	4.10	13.45
										700	6.50	21.33
										900	7.60	24.94
										1000	8.90	29.19

Specifications subject to change without notice.

Data Applications

50Ω Coax Cables, DEC17-00324 Specifications

Coax



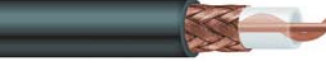
Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2280K DEC 17-00324 Plenumax NEC CEC CMP CMP	12 AWG Solid BC 1.4Ω/4.6Ω	Foam FEP .247/6.27	Quad shield AL foil, 90% TC braid AL foil and 90% TC braid 0.9Ω/3.0Ω	PVDF(K) .020/.51	Orange or Blue .366/9.3	26.2	85.9	78%	50Ω	5	0.44	1.44
										10	0.57	1.87
										20	1.46	4.79
										100	1.97	6.46
										450	2.83	9.28
										850	4.05	13.28
										1000	5.60	18.37

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Data Applications

93Ω Coax Cables, RG62 Type





Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2249V Plenumax  NEC CEC CMP CMP	22 AWG Solid CCS 46.1Ω/151Ω	Foam FEP .144/3.66	90% BC braid 3.2Ω/10.5Ω	CommFlex(V) .013/.33	White .198/5.0	12.1	39.7	84%	93Ω	1	0.95	3.11
										10	2.08	6.83
										50	2.23	7.31
										100	3.00	9.84
										200	4.40	14.44
										400	6.30	20.67
										700	8.35	27.34
										900	10.50	34.45
										1000	11.07	36.31
2250V IBM 4885584 RG62 Plenumax  NEC CEC CMP CMP	22 AWG Solid CCS 46.1Ω/151Ω	Foam FEP .144/3.66	95% BC braid 2.7Ω/8.9Ω	CommFlex(V) .015/.38	White .206/5.1	12.1	39.7	84%	93Ω	1	0.95	3.11
										10	2.08	6.83
										50	2.23	7.31
										100	3.00	9.84
										200	4.40	14.44
										400	6.30	20.67
										700	8.35	27.34
										900	10.50	34.45
										1000	11.07	36.31
6609 IBM 323921 Appliance  NEC CM AWM 1478	22 AWG Solid CCS 46.1Ω/151Ω	Air dielectric/ PE tube .146/3.71	95% BC braid 2.7Ω/8.9Ω	Flame- retardant PVC .035/.89	Black .242/6.1	13.5	44.3	84%	93Ω	1	0.26	0.84
										10	0.81	2.66
										50	1.80	5.91
										100	2.70	8.86
										200	3.90	12.80
										400	5.50	18.05
										700	7.60	25.94
										900	8.80	28.87
										1000	9.30	30.51

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Data Applications






100Ω Coax Cables, Twinax

Part Number Safety Rating	Conductor Size & Type Max DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
2291K Plenumax  NEC CEC CMP CMP	(1) 20 AWG Stranded BC, (7x28)	Solid FEP .194/4.93	96% TC braid 2.6Ω/8.5Ω	PVDF(K) .016/.41	Cream .252/6.4	13.0	42.7	66%	100Ω	1	0.36	1.18
										10	1.08	3.54
										50	2.81	9.21
										100	3.75	12.30
										200	5.04	16.54
										400	10.14	33.27
7901  NEC CL2	(1) 20 AWG Stranded TC (7x28) 9.5Ω/31.0Ω	Solid PE .240/6.10	AL foil and 85% TC braid 1.8Ω/5.9Ω	Flame- retardant PVC .030/.76	Black .329/8.4	15.0	50.9	66%	100Ω	1	0.40	1.31
										10	1.10	3.61
										50	2.50	8.20
										100	4.10	13.45
										200	6.40	21.00
										400	10.20	33.47

Specifications subject to change without notice.
Plenumax is a trademark for CommScope plenum products.

Low Loss 50Ω Wireless Broadband Communications Coaxial Cable



Part Number Safety Rating	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & Dimensions in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nominal Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
0668 WBC-195  NEC CMR CEC CATVR	.037/.938 Solid BC 7.60Ω/24.94Ω	Foam PE .110/2.79	AL foil and 90% TC braid 4.90Ω/16.07Ω	PE or FR-PVC .028/.711	Black .195/4.95	24.3	79.7	80%	50Ω	30	2.00	6.56
										50	2.60	8.53
										150	4.40	14.43
										220	5.40	17.71
										450	7.80	25.58
										900	11.10	36.41
										1500	14.50	47.56
										1900	15.72	51.56
										2000	16.90	55.43
										2500	19.00	62.32
0669 WBC-200  NEC CMR CEC CATVR	.044/1.12 Solid BC 5.36Ω/17.59Ω	Foam PE .116/2.95	AL foil and 90% TC braid 4.90Ω/16.07Ω	PE or FR-PVC .026/.660	Black .195/4.95	24.5	80.4	83%	50Ω	30	1.80	5.90
										50	2.30	7.54
										150	4.00	13.12
										220	4.80	15.74
										450	7.00	22.96
										900	9.90	32.47
										1500	12.90	42.31
										1900	14.61	47.92
										2000	15.00	49.20
										2500	16.90	55.43
0670 WBC-240  NEC CMR CEC CATVR	.056/1.42 Solid BC 3.20Ω/10.5Ω	Foam PE .150/3.81	AL foil and 90% TC braid 3.89Ω/12.76Ω	PE or FR-PVC .031/.787	Black .240/6.09	24.2	79.4	84%	50Ω	30	1.30	4.26
										50	1.70	5.58
										150	3.00	9.84
										220	3.70	12.14
										450	5.30	17.38
										900	7.60	24.93
										1500	9.90	32.47
										1900	10.90	35.75
										2000	11.50	37.72
										2500	12.90	42.31
0623 WBC-400  NEC CMR CEC CATVR	.108/2.74 Solid CCA 1.32Ω/4.33Ω	Foam PE .285/7.24	AL foil and 90% TC braid 2.10Ω/6.9Ω	PE or FR-PVC .043/1.09	Black .405/10.27	23.9	78.4	85%	50Ω	30	.70	2.30
										50	.90	2.95
										150	1.50	4.92
										220	1.90	6.23
										450	2.70	8.86
										900	3.90	12.79
										1500	5.10	16.73
										1900	5.82	19.09
										2000	6.00	19.68
										2500	6.80	22.30
0624 WBC-600  NEC CMR CEC CATVR	.176/4.47 Solid CCA 0.55Ω/1.8Ω	Foam PE .455/11.6	AL foil and 90% TC braid 1.3Ω/4.3Ω	PE or FR-PVC .050/1.27	Black .590/14.96	23.4	76.7	87%	50Ω	30	.42	1.38
										50	.55	1.80
										150	1.00	3.28
										220	1.20	3.94
										450	1.70	5.58
										900	2.50	8.20
										1500	3.30	10.82
										1900	3.79	12.43
										2000	3.90	12.79
										2500	4.40	14.43

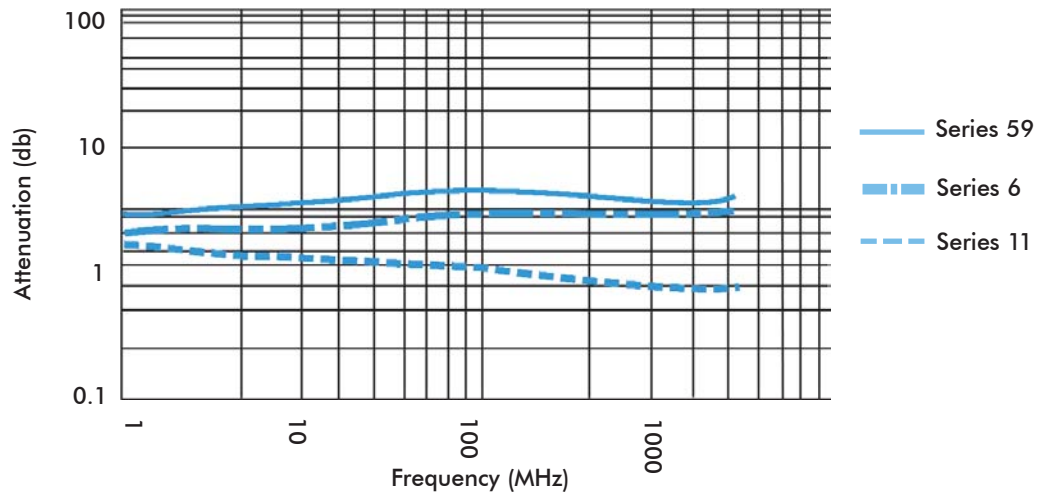
Specifications subject to change without notification.

**This is only a partial listing of CommScope's coaxial cables for wireless applications.
Get your copy of our Cell Reach or WBC catalog by calling 800.982.1708**

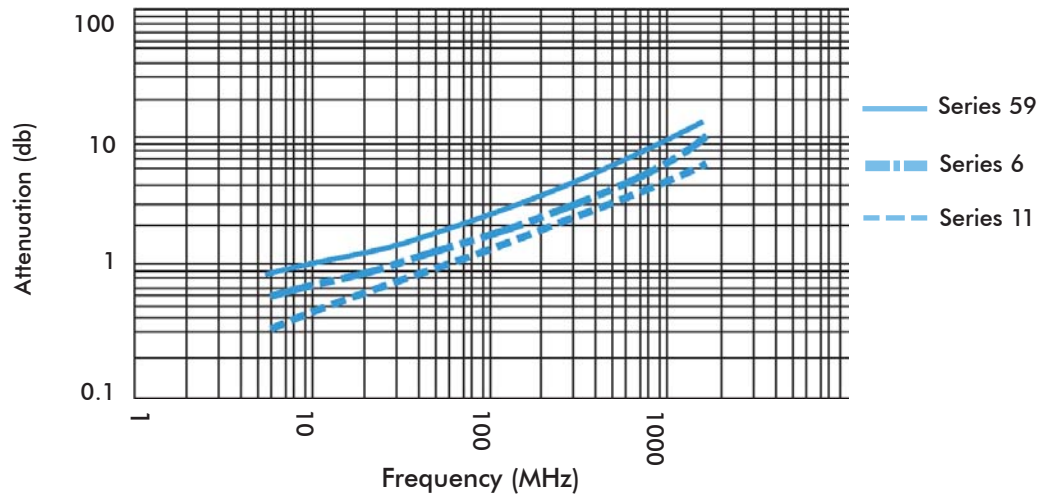
Attenuation

Attenuation is the loss of electrical power as a signal travels along a cable. There are two types of losses that affect the attenuation of a cable: loss due to conductivity of conductors (center conductor and shield) and dielectric loss. Both losses increase with frequency.

Attenuation for Series 59, 6, 11 plenum cables



Attenuation for Series 59, 6, 11 non-plenum cables



Capacitance

Capacitance is the measurement of energy absorbed by the cable. It is caused by the difference in electrical potential of the conductors and is measured in picofarads per foot (Pf/ft). Like impedance, it is related to the inner and outer conductor sizes and the core dielectric constant. In a given cable design, capacitance and impedance are inversely proportional.

Capacitance is determined by the formula
$$\frac{7.354 E_r}{\log_{10} \frac{D}{ad}}$$

where E_r is the dielectric constant of the cable core, D is the dielectric diameter, d is the conductor diameter and a is the conductor stranding factor.

Impedance

Characteristic impedance is a measurement of resistance to the electrical current being carried in a cable. It is measured in units called ohms (Z_O) and is directly related to the ratio between inner conductor dimension and the outer conductor dimension, and inversely related to the dielectric constant of the cable core. Unlike conductor resistance, impedance does not vary with cable length.

For a system to work at maximum efficiency, the nominal impedance of the transmitter, receiver and cable must precisely match. An incorrect match will produce reflection loss.

Nominal impedance is determined by the formula
$$Z_O (\Omega) = \frac{138.2}{\sqrt{E_r}} \log_{10} \frac{D}{ad}$$

The factors are the same as they are for capacitance above.

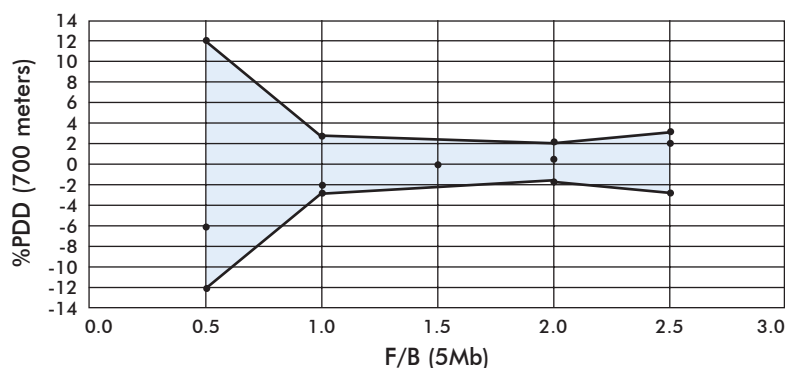
Phase Delay

Phase delay is caused by high frequency signals traveling faster than low frequency signals. In a carrier band network (such as MAP), information is sent as digital code where a low-frequency tone of a certain length means the binary bit "one" and a high-frequency tone means "zero". Because the low-frequency tones travel slower, they have a tendency to lag behind the faster, higher frequency signals and arrive out of phase because of this delay. If this phase delay becomes too great, the signals overlap and a type of interference called jitter is produced.

The IEEE specification for MAP includes a window of allowable delay. As shown in the graph, CommScope MAP cable easily meets this specification.

% Phase Distortion Delay
(quad-shielded Series 11
with 5 Mb data rate)

F = Frequency
B = Bit Rate



Shield performance

Braid shields are composed of thin strands of tinned or bare copper wires interwoven around the conductors within a cable. In addition to providing excellent shielding properties, braid shields are very flexible and add to the structural integrity of the cable.

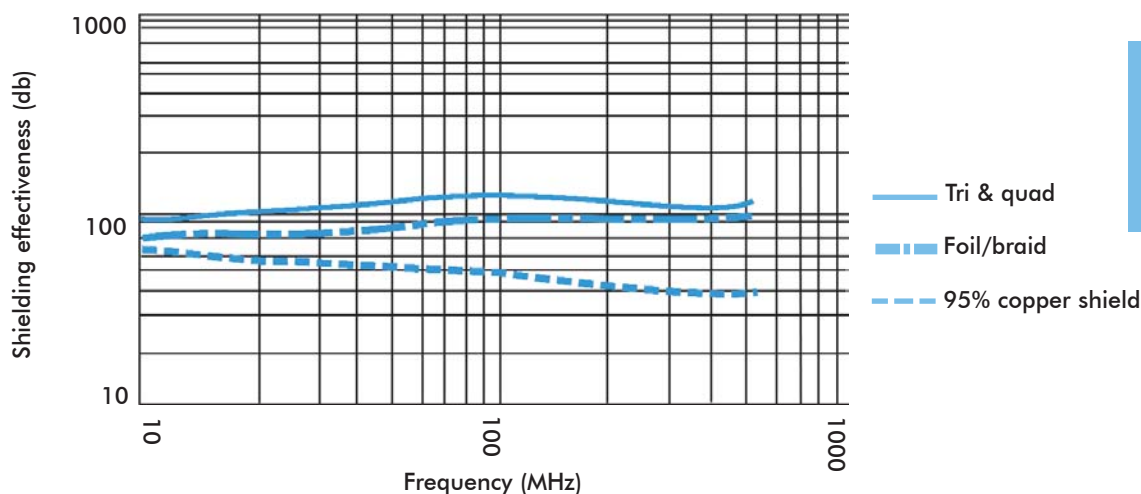
Braid shields differ widely in their construction; braid angle, strand diameter, wire type, numbers of ends per carrier and the number of carriers contribute to the effectiveness of the shield. Shield coverage varies between 40% and 95% for single braids and up to 98% for double braids.

Foil/braid combination shields consist of a tinned copper or aluminum braid over an aluminum/polyester or aluminum/polypropylene foil tape. Braid coverage varies between 40% and 95%. However, aluminum foil coverage is 100%.

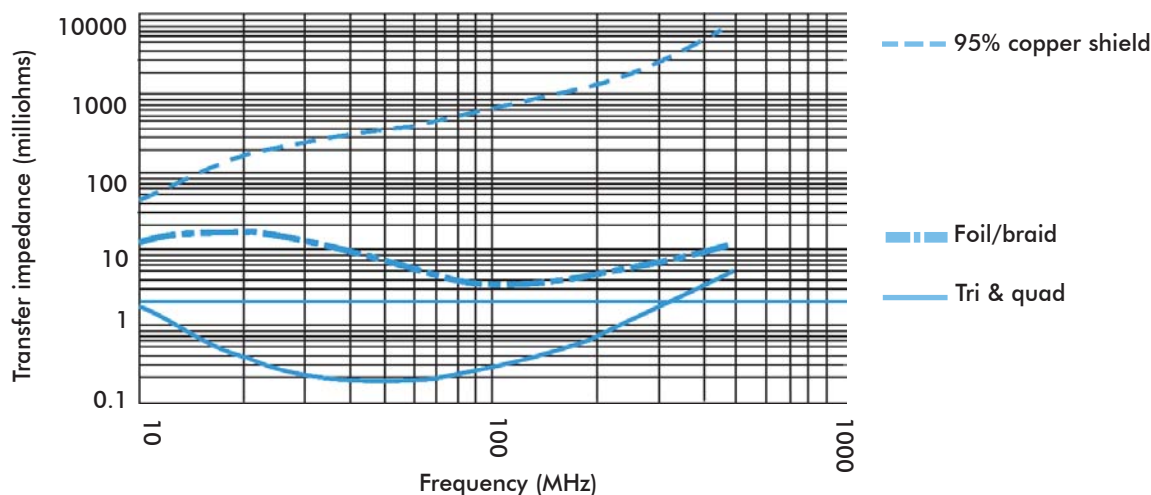
To gain greater shield effectiveness, an additional layer of foil is placed over the existing foil and braid which produces a Tri Shield cable. The highest grade shield effectiveness is found in Quad Shield cables. A Quad Shield coverage design consists of an aluminum foil with a 60% braid covered by an additional foil and 40% braid.

As shown in the graphs below, combination shields are more effective and offer better transfer impedance properties than single braid shields. Quad shielding also offers better long term performance because it is less effected by repeated flexing.

Shield effectiveness



Transfer impedance



Structural Return Loss

Structural return loss is the measure of power loss on a cable or system and is caused by discontinuities in the cable conductor or dielectric. If these discontinuities are regularly spaced along a cable, they can cause severe transmission losses for frequencies whose wavelengths are twice that of the distance between these discontinuities.

Structural return loss is an unfavorable characteristic of poorly-made cable, although careless installation can cause it as well. CommScope manufacturing lines are constantly computer-monitored to avoid irregularities in the manufacturing process that could cause these flaws. Additionally, every reel of CommScope coaxial cable is sweep-tested prior to shipping.

Tilt

Another problem caused by different characteristics of low and high frequency signals is tilt. Although they are faster, high-frequency signals tend to lose power more quickly over distance than lower frequency signals. This power loss, called attenuation, is expressed in decibels (see attenuation above for more details) and the difference between the attenuations of the high and low frequency signals for the entire length of an installed cable in a carrier band system cannot exceed a certain tilt factor expressed in decibels (dB).

Tilt determines the maximum length of a cable segment in a carrier band network and is determined by $\frac{N}{A_1 - A_2}$

where N is the maximum allowable tilt permitted by the system, A_1 is the attenuation of the high frequency signal and A_2 is the attenuation of the low frequency signal.

Velocity of Propagation

Nominal velocity of propagation is the speed of the signal in a given cable. In a vacuum, electromagnetic radiation (light, radio waves, etc.) travels at the speed of light. In a cable, it travels somewhat slower and in direct inverse proportion to the dielectric constant; the lower the dielectric constant, the closer to the speed of light the signal travels.

Velocity of propagation is given as a percent figure of the speed of light and is calculated by $\frac{1}{\sqrt{E_r}} \times 100$

where E_r is the dielectric constant of the cable core.

Trade Part Numbers Cross Reference



CommScope Part No.	Belden Part No.	Genesis Part No.	Remeo Part No.	Coleman Part No.	CommScope Part No.	Belden Part No.	Genesis Part No.	Remeo Part No.	Coleman Part No.
0623	9914				5574				
0624					5700	533945	5002		
0668					5715	9248			92032
0669					5722				
0670					5725	9114	5010		92001
2020K	9104P	725104	725104		5726	9116	5003	1574**	92003
2020V	9104P	725104	725104		5726R				920036
2022V	1151A				5728	1190A			
203505					5740	1189A	5007	1575**	92041
2037V	643948	5351		99969	5740R				
2039V			725102	921024	5742		5008		992151
2041K	88241				5765	1694A			
2045V	82108				5796		5012		992132
2054K					5901	9292			
2054V					5906				
2065V	1506A				5910				
2100V	82240		725100		5912R				
2104V	82907			921021	5913	1523A	5018		
2220V					5914	1525A			
2227K	1152A	5352	725103	921019	5915			1586**	
2227V	1152A	5352		921019	5940			1562	992165
2229V	6339Q8		725103		5950	3094A			
2249V	82262				6609	9269			92002
2250V	86262		725106		7501	8281			993201
2275K	9116P	5353			7505	8281B			
2275V	9116P	5353			7530				
2276V	82120*		725105	921015	753603	1406B,1164			
2277V	633948				753604	1407,1167B		1529	
2279V	86120				753605	1417B,1418B			
2280K	89880				7538	1855A			
2282K					7713	8267			
2284K					7714				991075
2285K			725107		7815	9888			
2287K					7901	9207			
2291K	89207		725108						
2312K									
3104	9907								
3130	8240								
3135	8259								
3136			1460						
3139	8219								
3247	8237								
3249									
5540	1186A								
5553	1426A	5001		92074					
5554		5009							
5555	8221		1524	92004					
5560	9244		1550	991055					
5563	8241			991061					
5565	1505A								
5571	91009275		1570	992101					
5572	9104			992109					
5572R									
5573	9108								

*CommScope 90% AL Braid; Belden 95% TC Braid

**CommScope CCS Center Conductor; Remeo BC

Reel Size and Shipping Weights

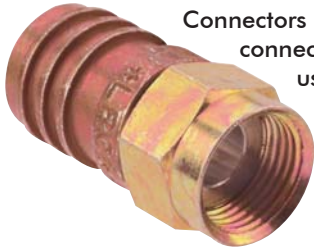


Coax

CommScope Part Number	Spool Length	Wt/kft
0132V	1000	34
0359V	1000	66
0458	1000	94
0461	1000	58
0467	1000	81
0490	1000	122
0491	1000	78
0668	1000	21
0669	1000	22
0670	1000	34
0623	1000	68
0624	1000	131
2020K	1000	23
2020V	1000	21
2022V	1000	25
203505	1000	14
2037V	1000	30
2039V	1000	30
2041K	1000	44
2045V	1000	41
2054K	1000	47
2054V	1000	44
2065V	1000	34
2100V	1000	27
2104V	1000	29
2125K	1000	48
2220V	1000	65
2227K	1000	40
2227V	1000	29
2229V	1000	35
2249V	1000	24
2250V	1000	40
2275K	1000	29
2275V	1000	27
2276V	1000	29
2277V	1000	43
2279V	1000	47
2280K	1000	136
2282K	1000	113
2284K	1000	58
2285K	1000	79
2287K	1000	85
2291K	1000	64
2312K	2400	127
2426K	1000	110
2427K	1000	113
3104	1000	27
3130	1000	33
3135	1000	36
3136	1000	24
3139	1000	31
3222	1000	98
3226	1000	102
3227	1000	102
3228	1000	112
3229	1000	112

CommScope Part Number	Spool Length	Wt/kft
3247	1000	120
3249	1000	116
5540	1000	34
5553	1000	39
5554	1000	58
5554M	1000	
5555	1000	41
5560	1000	42
5563	1000	42
5565	1000	34
5571	1000	28
5572	1000	28
5572R	1000	28
5573	1000	28
5574	1000	20
5575	1000	28
5586	1000	60
5654	1000	62
5700	1000	42
5715	1000	44
5722	1000	38
5725	1000	28
5726	1000	28
5726R	1000	34
5728	1000	28
5729	1000	32
5730	1000	34
5731	1000	45
5740	1000	34
5740F	1000	34
5740R	1000	36
5741	1000	38
5742	1000	71
5765	1000	45
5781	1000	40
5782	1000	85
5786	1000	58
5787	1000	58
5788	1000	81
5789	1000	81
5796	1000	46
5901	1000	87
5903	1000	
5906	1000	87
5910	1000	77
5912R	1000	56
5913	1000	78
5914	1000	52
5915	1000	63
5916	1000	78
5916R	1000	78
5917	1000	78
5918	1000	155
5940	1000	62
5950	1000	62
6609	1000	42
7501	1000	76
7505	1000	62

CommScope Part Number	Spool Length	Wt/kft
7530	1000	56
753603	1000	83
753604	1000	101
753605	1000	135
7538	1000	17
7713	1000	122
7714	1000	134
7725	1000	40
7726	1000	44
7815	1000	140
7901	1000	81
8060	1000	79
8126	1000	144
8136	1000	160
8236	1000	130
8530	1000	193



Connectors are manufactured to fit each series and size of coaxial cable. CommScope does not stock or sell connectors. Customers may use the information below to assist in locating and obtaining connectors for use with our coaxial cable. By providing this list, CommScope neither endorses nor represents the following manufacturer's products.

AMP

Phone: 800-522-6752

Fax: 717-986-7575

Amphenol Corporation

One Kennedy Drive

Danbury, CT 06810

Phone: 203-743-9272

Fax: 203-796-2032

Gilbert Engineering

5310 W. Camelback Rd.

Glendale, AZ 85301

Phone: 800-528-5567

Fax: 800-344-6358

Raychem

Telecommunications Division

8000 Pufoy Road

Fuquay-Varina, NC 27526

Phone: 919-557-8900

The Siemon Company

76 Westbury Park Road

Watertown, CT 06795-0400

Phone: 860-945-4395

Fax: 860-945-4225

Thomas & Betts, LRC Connectors

Cable Communications Division

8155 T&B Boulevard

Memphis, TN 38125

Phone: 800-920-0328

Trompeter

31186 LaBaya Dr.

Westlake Village, CA 91362-4047

Phone: 800-982-2629

Fax: 818-706-1040

Packaging

Products listed in this catalog are available on reels in lengths of 500 ft. and 1000 ft. Most 500 ft. products are available in boxes, however there are exceptions (e.g., messengered, dual products). Reel lengths may vary +/-10%. Reels and boxes are palletized for shipment. Shipments are subject to full pallet quantities or full pallet layers as a minimum.

Method of Shipment

Method of shipment at discretion of shipper, unless specified in order.

Inspection

Final inspection shall be made at factory prior to shipment.

Terms and Conditions

On approved credit, net 30 days from date of invoice; 1.5% finance charge equivalent to 18% per annum will be added after due date. All orders subject to acceptance at factory and will be billed at price in effect at time of shipment. Prices, discounts, terms, conditions, and specifications are subject to change without notice.

Warranty For Satellite Products

CommScope is the only satellite cable manufacturer to offer a 2-for-1 guarantee. If the CommScope cable does not perform up to the application standard, we will replace the installed cable free of charge. For each 1000 ft. of CommScope cable that does not meet the application standard, we will replace it with 2000 ft. of same part number.



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The name Allen-Bradley, DH, DH+, Remote I/O and DH-485 are trademarks of Allen-Bradley Company, a division of Rockwell International Corporation, Inc.

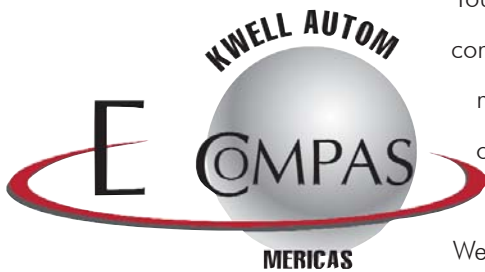
ControlNet and the ControlNet logo are registered trademarks of ControlNet International, Ltd.

DeviceNet and the ODVA logo are registered trademarks of the Open DeviceNet Vendors Association.

Blue Hose is a registered trademark of Belden, Inc.

DEC is a registered trademark of Digital Electric Corporation.

Ethernet is a registered trademark of Digital Electric Corporation, Intel and Xerox Corporation.



Your decision to purchase equipment for your facility clearly demonstrates your company's commitment to manufacturing excellence. As one of the largest manufacturers of wire and cable in the world, we applaud your goal of achieving optimal performance.

We at CommScope continually face this same goal of optimizing our manufacturing efficiencies via the right balance of cost, throughput, quality and flexibility to remain competitive in the global marketplace.



CommScope employs a vast network of programmable logic controllers (PLCs) and statistical process controls (SPCs) that work in tandem to measure and maintain a consistent, quality product. Our proprietary testing systems, including electrical sweep testing, assure that the cable you get from CommScope performs to manufacturers' specified levels of performance. We are an ISO-9001 certified manufacturer.

CommScope is a member of Rockwell Automation's Encompass Program, ControlNet International, and the Open DeviceNet Vendor's Association (ODVA). These relationships assure that the cables we have designed will work for your systems now and in the future.



This catalog represents CommScope's continued commitment to providing you - the customer - with one of the broadest selections of cables for your specific application. We hope this catalog will serve as a key reference tool as you move toward manufacturing excellence.

Again, congratulations on your purchase and thank you in advance for selecting CommScope as your cable supplier.

CommScope Industrial cables are designed to deliver optimum transmission and mechanical performance under real-world conditions. CommScope does recommend that the cable be installed correctly when dealing with electromagnetic interference (EMI), oils and chemicals, excessive heat and physical movement, vibration and physical damage.

Excessive cable tension during installation may damage the conductors, shielding, or jacket. Minimum bend radius for the cable should not exceed 10 times the cable OD (Outer Diameter) for copper cables and 20 times the cable OD for fiber cables. In an open ceiling installation, the cable should be supported every 3 to 5 feet. It is best to vary the support distance. Avoid installations where the cable will be crushed. Avoid excessive weight on cables installed in tray. When installing cable in conduit, the conduit must be properly bonded to ground (Refer to the appropriate section of the National Electric Code). The cable must meet the listing requirements of the NEC.

Install CommScope Shielded Industrial cable with the same regard for AC power lines and other sources of RF and EMI as you would any other shielded cable solution. It is important to protect the cable from physical damage. The shield must not be exposed over the cable length. Avoiding sharp surfaces is a must. Do not exceed the minimum bend radius of the cable during installation.

CommScope all dielectric fiber cable may be installed without regard to Electromagnetic Interference. Proper cable installation techniques must be applied. Do not exceed the cable's short-term tensile load. Do not exceed the minimum bend radius for the cable. Avoid excessive crush along with other physically damaging conditions.

Networks and Cables

part number cross reference



Manufacturers require that cables for their networks meet exacting standards for design, materials, construction, and performance. In order to become an approved supplier, CommScope had to meet rigorous qualifications. This means that CommScope cables can be substituted for other industry-wide part numbers.

Refer to the table below for the CommScope cable that matches your application and the requisite (or other specifier) and trade part number. The cross reference provides the most accurate information available. It is the purchaser's responsibility to compare specification sheets and determine if these products meet the required specifications for their intended use.

Profibus	Cable Description	Siemens Part Number	CommScope Part Number	Belden Part Number	Page No.
Profibus™	General Purpose	6XV1 830-0AH10	9030	-	12
	Direct Burial	-	9030B	-	12
Allen Bradley	Cable Description	Allen-Bradley Part Number	CommScope Part Number	Belden Part Number	Page No.
DH™, DH+™ Data Highway™ Data Highway Plus™ Remote I/O™	General Purpose	1770 - CD	9022 Blue Highway™	9463 Blue Hose™	13
	Limited Distance/Special Applications	-	9024	-	13
	Dual Conductor	-	9022D	YR28826	13
	Plenum	-	4022K	89463	13
	Direct Burial	-	9022B	YR28762	13
	Interlocked Aluminum Armor	-	9022AI	129463	14
	Interlocked Galvanized Steel Armor	-	9022SI	139463	14
	Hi-Flex	-	9022F	YR28761	14
ControlNet™	Messengered	-	9022M	-	14
	General Purpose	1786 - RG6	5060	3092A	15
	Dual Conductor	-	5060D	9072	15
	Riser	-	5060R	3131A	15
	Plenum	-	5061 & 5061V	3093A	15
	Direct Burial	-	5060B	1190A	15
	Intrinsically Safe	-	5060IS	-	15
	Limited Distance/Special Applications	-	5065	-	15
	Corrugated Steel Armor	-	5060A	-	16
	Interlocked Aluminum Armor	-	5060AI	121189A	16
	Interlocked Galvanized Steel Armor	-	5060SI	-	16
	Hi-Flex	1786 RG6 F/A	5060F	YR28890	16
	Messengered	-	5060M	-	16
DeviceNet™	Trunk (Thick)	1485-PI-XXX	5070	3082A	17
	Drop (Thin)	-	5080	3084A	17
	CPE Trunk (Thick)	-	5070CP	3083A	17
	CPE Drop (Thin)	1485-PI-CXX	5080CP	3085A	17
	Interlocked Aluminum Armor (Thick)	-	5070AI	-	17
	Interlocked Aluminum Armor (Thin)	-	5080AI	-	17
DH-485™	1.5 Twisted Pair Riser	-	5090	3106A (replaces 9842)	18
Longline™	Riser	1778 - CR	6600	-	18
	Plenum	-	6600TK	88723	18

Note: Product specifications may change without notice and affect accuracy within cross reference.

Networks and Cables



part number cross reference

Manufacturers require that cables for their networks meet exacting standards for design, materials, construction, and performance. In order to become an approved supplier, CommScope had to meet rigorous qualifications. This means that CommScope cables can be substituted for other industry-wide part numbers.

Refer to the table below for the CommScope cable that matches your application and the requisite (or other specifier) and trade part number: The cross reference provides the most accurate information available. It is the purchaser's responsibility to compare specification sheets and determine if these products meet the required specifications for their intended use.

Ethernet	Cable Description	DEC Part Number	CommScope Part Number	Belden Part Number	Page No.
Industrial Ethernet	ICAT5e Series Twisted Pair Category 5e Ethernet Cables		2001		19
			2002		19
			2003		19
			2003B		19
			2004		19
Gigabit Ethernet 155 Mb/s ATM	UltraMedia Cat 6 Plenum	-	7504	-	20
	UltraMedia Cat 6 Non Plenum	-	75N4	-	20
	Ultra II Cat 5e+ Plenum	-	5504M	-	20
	Ultra II Cat 5e+ Non Plenum	-	55N4	-	20
DECNet Ethernet 802.3	Trunk (thick)	17- 00451 - 00	3250	9880	21
	Plenum Trunk	17- 00324 - 00	2280K	89880	21
	Drop (thin)	17- 01248 - 00	3104	9907	21
	Plenum Drop	17- 01246 - 00	2104K & V	89907	21
	Transceiver	17- 01320 - 00	9050	9901	21
	Plenum Transceiver	17- 01319 - 00	4050K	89901	21
Fiber	Cable Description	Part Number	CommScope Part Number	Belden Part Number	Page No.
Outside Plant	Fiber Feeder Armored		O- XXX -FA-XY-F12NS		22
Indoor/Outdoor	Fiber Feeder		R- XXX -FN-XY-F12SS		22
Indoor/Outdoor Distribution	4 fiber		Z- 004 -DS-XY-FSDBK		23
	6 fiber		Z- 006 -DS-XY-FSDBK		23
	8 fiber		Z- 008 -DS-XY-FSDBK		23
	12 fiber		Z- 012 -DS-XY-FSDBK		23
Indoor/Outdoor Cordage	Simplex		Z- 001 -SP-XY-F20BK		23
	Duplex		Z- 002 -DU-XY-F25BK		23
	Zipcord		Z- 002 -ZC-XY-F25BK		23
	2 Fiber Interconnect		Z- 002 -IC-XY-FSDBK		23

PROFIBUS is the leading open fieldbus system in Europe and it enjoys worldwide acceptance. Areas of application include manufacturing, process and building automation. PROFIBUS is an international, open fieldbus standard which was standardized in the European fieldbus standards EN 50170 and EN 50254. This provides optimal protection of vendor and user investments and vendor-independence is ensured.

RS 485 Transmission for PROFIBUS DP/FMS

RS 485 transmission is the transmission technology most frequently used by PROFIBUS. The RS 485 transmission technology is very easy to handle. The bus structure permits addition and removal of stations or step-by-step commissioning of the system without influencing the other stations. Later expansions have no effect on stations already in operation.

Transmission speeds between 9.6 kbit/sec and 12 Mbit/sec can be selected. One unique transmission speed is selected for all devices on the bus when the system is commissioned.

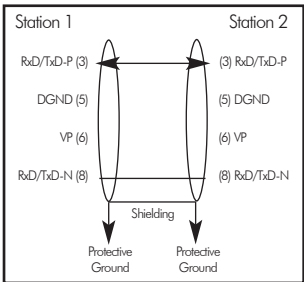
Table 1: Basic characteristics of RS 485 transmission technology

Network topology	Linear bus, active bus termination on both ends, stub lines only permitted for baud rates of ≤ 1.5 Mbit/sec
Medium	Shielded, twisted pair cable. Shielding may be omitted depending on the Electromagnetic Compatibility (EMC)
Number of stations	32 stations in each segment without repeaters, up to 127 stations with repeaters
Plug connectors	Preferred: 9-pin D sub plug connector

Table 2: Distances based on transmission speed for type A cable

Baud rate (kbit/sec)	9.6	19.2	93.75	187.5
Distance/segment	1200m	1200m	1200m	1000m
Baud rate (kbit/sec)	500	1500	12000	
Distance/segment	400m	200m	100m	

Cabling Termination



The maximum cable length depends on the transmission speed. See table 2. The specified cable length can be increased by the use of repeaters. The use of more than 3 repeaters in series is not recommended.

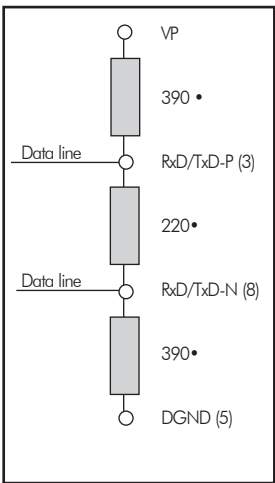
Cable length specifications in table 2 are based on type A cable with the following EN 50170 parameters:

- Impedance: 135 to 165 Ohms @3-20 MHz
- Capacity: <30 pF/m
- Loop resistance: 110 Ohms/km
- Wire OD: >0.64 mm
- Conductor area: >0.34 mm²

Fiber Optic Transmission

Fiber optic conductors can be used for PROFIBUS for applications in environments with very high electro-magnetic interference (EMI) and to increase the maximum distance for high transmission speeds. Fiber permits networking of areas up to 100 km. Many vendors offer special bus plug connectors with integrated conversion of RS 485 signals to fiber optic conductors and vice versa. This provides a very simple method of switching between RS 485 transmission and fiber optic transmission within one system.

Bus Termination



PROFIBUS™ Cable Installation

CommScope's 9030 series PROFIBUS cables are designed to deliver optimum electrical and mechanical performance under real-world conditions. CommScope does recommend that the cable be installed correctly when dealing with electromagnetic interference (EMI), oils and chemicals, excessive heat and physical movement, vibration and physical damage.

Excessive cable tension during installation may damage the conductors, shielding or jacket. Minimum bend radius for PROFIBUS cable should not exceed 6 times the cable OD. In an open ceiling installation, the cable should be supported every 3 to 5 ft. It is best to vary the support distance. Avoid installations where the cable will be crushed. Avoid excessive weight on the cables installed in tray. When installing cable in conduit, the conduit must be properly bonded to Ground and must meet the listing requirements of the NEC.

Shielded Pair Installation

Install CommScope Shielded PROFIBUS cable with the same regard for AC power lines and other sources of RF and EMI as you would any other shielded twisted pair cable. It is important to protect the cable from physical damage. The shield must not be exposed over the cable length. Avoiding sharp surfaces is a must. Do not exceed the minimum bend radius of the cable during installation.

Fiber Installation

CommScope fiber cable may be installed without regard to Electromagnetic Interference. Proper cable installation techniques must be applied. Do not exceed the cable's short term tensile load. Do not exceed the minimum bend radius for the cable. Avoid excessive crush along with other physically damaging conditions.

DH™ Data Highway Installations

Overview and Cabling Tips for DH+™ and Remote I/O™



DH™ Data Highway is one of the most popular methods of connecting an industrial control network. Up to 64 stations (programmable controller/adapters or a computer) may be joined over a Data Highway.

The Data Highway uses a twinaxial cable as both a **trunk** cable (the network backbone) and as a **drop** cable (which connect the trunkline to the station). A trunk cable may total up to 10,000 ft/3,048 meters) in overall length, while a drop cable may not exceed 100 ft/30 meters in length.

CommScope's **9022/4022 series twinaxial cables** meet or exceed specific performance and construction standards established by manufacturers. The standard PVC-jacketed twinax is complemented by a broad range of other styles, including those intended for armored, aerial, burial, hi-flex, plenum and limited distance special application installations.

Data Highway Cable Connection and Termination

Two styles of connectors are offered for the Data Highway. If you frequently move stations or reconfigure your network, use **connector kits**, which use soldered jacks and plugs to attach station droplines and connect segments of trunkline. You will also need at least one terminator set, as unterminated connections will cause signal reflection and degrade system performance.

If you rarely reconfigure your network, use **station connectors**, which are grounded boxes with a screw-type terminal block for attaching the conductors.

The 1770-SC connector set comes with a 15-pin connector to attach the dropline to the controller.

Data Highway Cable Installation Tips

CommScope 9022 series cables are designed to deliver optimum electrical and mechanical performance under real-world conditions. However, manufacturers recommend that the cable be isolated as much as possible from electromagnetic interference(EMI), oils and chemicals, excessive heat/flame and physical movement, vibration and physical damage.

Electromagnetic interference can be avoided by:

- keeping the cable at least 3 ft/1 meter from electrical motors, transformers, arcs and microwave radiation
- running DH cables at a 90° angle to all power lines
- preventing the connectors from touching conductive surfaces
- if running in conduit, making sure the conduit is well grounded along its entire length.

Chemical and thermal problems can be avoided by:

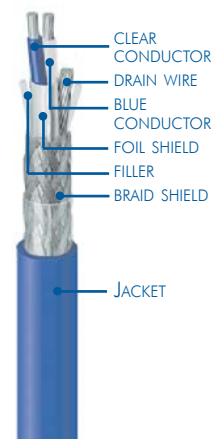
- keeping the cable away from oil, grease, acids, strong chemicals, open flame, steam and steam lines, boilers and equipment hotter than 60° C that might damage the cable
- water, steam or other liquids that might corrode the connectors.

Physical damage can be avoided by:

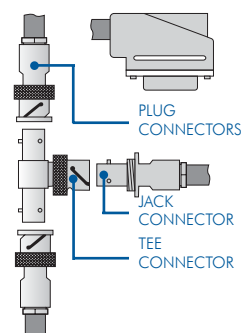
- routing the cable away from foot or vehicle traffic
- keeping away from abrasive surfaces such as concrete which may erode the cable
- not pulling the cable through undersize conduit.

Special note: Exerting tension on the cable at any time may damage the shielding or connectors. Always allow sufficient slack during installation so as to avoid any excessive tension.

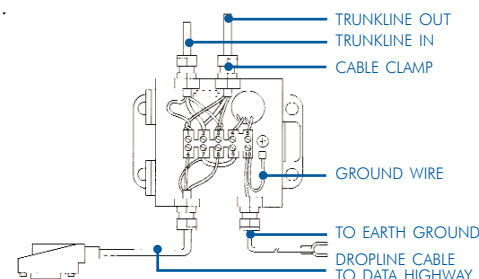
9022/4022 SERIES DATA HIGHWAY CABLE



1770-XG CONNECTOR SET



1770-SC STATION CONNECTOR



Industrial

ControlNet™ is a real-time, 10 Mb/sec network that permits both I/O data communications and upload/download of programming and configuration data over the same link. A ControlNet network may consist of up to five **trunk segments** of up to 3280 ft/1000 meters in length. Segments may be linked with active repeaters to form a total network length of 16400 ft/5000 meters. ControlNet also supports a fiber optic option for even longer distances.

Depending on network length, a ControlNet system connects up to 99 nodes (with a maximum of 48 devices per single segment). A node is a connection via a tap and drop cable to any of a variety of ControlNet-compatible components. ControlNet also supports redundant links so that the network will continue to operate despite a break in one of the cables.

ControlNet uses a low-loss **quad-shielded coaxial cable** as a trunkline. **CommScope's 5060/5061 series of coax cables** is based on a time-tested design and are engineered to meet or exceed ControlNet standards. The 5060 series is available in several configurations, including those intended for armored, aerial, burial, hi-flex, plenum, riser and limited distance and special application installations.

ControlNet uses a double-braid shielded coaxial cable as a dropline. **CommScope's 5065 coaxial cable** is used in ControlNet droplines. Installers can also use CommScope's 5065 coaxial cable in shorter (limited) distance droplines that can be supported by this 24 AWG cable. In addition, the smaller size of CommScope's 5065 coaxial cable allows for easier installations in limited space areas such as control cabinets.

ControlNet Cable Connection and Termination

All connections to the ControlNet trunk cable are made by taps, which may be installed anywhere along the trunk cable and have the drop cables already attached. BNC connectors are used to connect the taps to the trunk and link ControlNet cable segments. Only one unconnected drop cable (usually for maintenance purposes) is permitted. If you are planning a node but have not installed the device to which it will be attached, use a bullet connector on the trunk to reserve its location.

The number of taps on a segment will determine its maximum length. For instance, a segment with only two nodes can run the full 3280 ft/1000 meters. However, a segment supporting the maximum number of 48 nodes may only run 820 ft/250 meters. Repeaters count as devices, but not as nodes. 75Ω terminators must be attached to the ends of the trunk cable.

Taps, BNC connectors and terminators are available from several quality manufacturers.

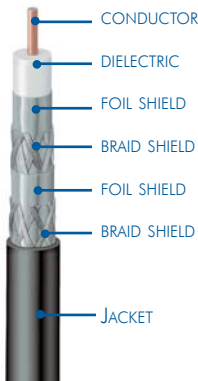
ControlNet Cable Installation Tips

CommScope 5060 series cables are designed to deliver optimum electrical and mechanical performance under real-world conditions. In order to minimize electromagnetic interference (EMI), manufacturers offer some specific wiring recommendations:

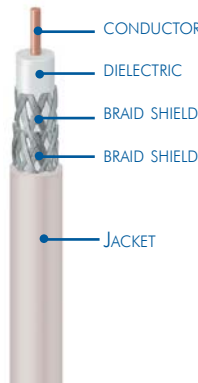
- ControlNet cables are isolated from earth and **MUST** be protected from inadvertent grounding - do not let connectors touch grounded surfaces
- Keep ControlNet cable at least 5 ft/1.5 meters from any high-voltage enclosures or sources of RF/microwave radiation
- If you must cross power feed lines, do so at right angles
- If used, the entire length of the conduit/wireway must be grounded back to the enclosure.

Manufacturers also recommend routing around category-1 conductors such as AC power lines, high-power AC and DC digital I/O lines and motion drive/motor power connections (see the above chart).

5060/5061 SERIES
CONTROLNET CABLE



5065 SERIES
CONTROLNET CABLE



Cabling Environment	Noise Source	Min. Safe distance
in an enclosure	Category-1 conductors <20A	3 in/0.08 m
	AC lines 20A to 100KVA	6 in/0.15 m
	AC lines >100KVA	24 in/0.60 m
in wireway/conduit	Category-1 conductors <20A	3 in/0.08 m
	AC lines 20A to 100KVA	6 in/0.15 m
	AC lines >100KVA	12 in/0.30 m
outside of conduit	Category-1 conductors <20A	6 in/0.15 m
	AC lines 20A to 100KVA	12 in/0.30 m
	AC lines >100KVA	24 in/0.60 m

DeviceNet™ is a low-cost communications link that both connects and powers industrial devices (switches, starters, sensors, drives, displays, etc.). Up to 64 devices can be controlled over a DeviceNet. Like ControlNet, DeviceNet components are manufactured by a broad range of affiliated suppliers.

CommScope's 5070 and 5080 power/data cables meet or exceed specific performance and construction standards established by the Open DeviceNet Vendors Association (ODVA). DeviceNet traditionally runs over a **two-pair shielded cable** (one power pair, one data pair) with a "thick" **trunk** cable (15 AWG power/18 AWG data) and a "thin," more flexible **drop** cable (22 AWG power/24 AWG data), although the trunk cable may be used as a drop cable as well. Both pairs are individually foil-shielded and covered with an overall braid shield.

Network length is dependent upon network speed. Using thick trunk cable:

- 125 kbps networks should not exceed 1,640 ft/500 meters with a cumulative drop length of 512 ft/156 meters
- 250 kbps should not exceed 820 ft/250 meters with a cumulative drop length of 256 ft/78 meters
- 500 kbps should not exceed 328 ft/100 meters with a cumulative drop length of 128 ft/39 meters.

Drop cables are limited to an overall length of 328 ft/100 meters regardless of network speed. The above cumulative drop length limits apply. Drop cables may not exceed 20 ft/6 meters in length for either network.

DeviceNet Cable Connection and Termination

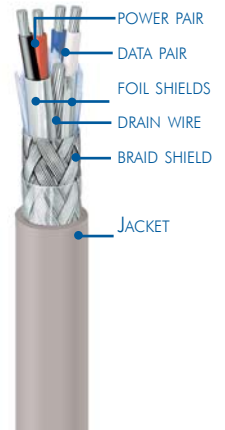
A number of manufacturers produce closed-style mini and micro five-pin connectors for DeviceNet cables - open-style connectors are available as well. Consult the DeviceNet product catalog for vendors. Trunk cable ends should be terminated with the proper terminating resistors.

DeviceNet Cable Installation Tips

The power pair of a DeviceNet cable is rated for 300V - therefore, keep them away from higher voltage cables unless they can be physically isolated in the conduit or cable tray. A minimum distance of 3 in/76 mm is recommended.

The network should be grounded at one location only.

**5070/5080
DEVICENET CABLE**



DH-485™ Installations

Overview and Cabling Tips



DH-485 is a version of the RS-485 token-passing ring network that monitors and communicates with devices and processes throughout a manufacturing plant. A DH-485 network consists of a **trunk** cable that connects link couplers to a control computer. The link couplers carry data to controllers over a drop cable. Up to 32 devices may be connected over a maximum trunk cable length of 4,000 ft/1660 meters.

DH-485 uses **CommScope's 5090 dual-shield one-and-a-half pair cable**. A shielded twisted pair cable is used for data communications. The single conductor acts as a common reference line between all the link connectors. All the conductors are covered with a braid shield.

DH-485 Cable Connection and Termination

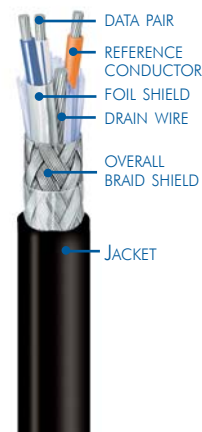
DH-485 cables are hardwired to link couplers. No special connectorization is necessary. The link couplers come with a standard dropwire to connect the link coupler to the controller.

DH-485 Cable Installation Tips

CommScope 5090 series of cables is designed to deliver optimum electrical and mechanical performance under real-world conditions. In order to minimize electromagnetic interference (EMI), manufacturers recommend routing around category-1 conductors such as AC power lines, high-power AC and DC digital I/O lines and motion drive/motor power connections. Refer to this chart for specifics.

Cabling Environment	Noise Source	Min. Safe distance
in wireway/conduit	Category-1 conductors <20A	3 in/0.08 m
	AC lines 20A to 100KVA	6 in/0.15 m
	AC lines >100KVA	12 in/0.30 m
outside of conduit	Category-1 conductors <20A	6 in/0.15 m
	AC lines 20A to 100KVA	12 in/0.30 m
	AC lines >100KVA	24 in/0.60 m

**5090
DH-485 CABLE**



Longline Installations

Overview and Cabling Tips

Manufacturers' Longline connections are used to directly connect two interface modules. Longline uses RS-232-C communications protocol to link modules as far apart as 7000 ft/2135 meters. The length of the link is determined by the data transmission speed:

- 2400 bits/sec can run up to a maximum of 7000 ft/2135 meters
- 4800 bits/sec can run up to a maximum of 6000 ft/1830 meters
- 9600 bits/sec can run up to a maximum of 4000 ft/1220 meters
- 19200 bits/sec can run up to a maximum of 2000 ft/610 meters

Longline uses **CommScope's 6600 series twin shielded twisted pair cable** for data communications. CommScope offers both plenum 6600TK and non-plenum 6600 flame rated cables.

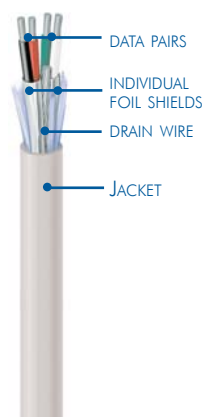
Longline Cable Connection and Termination

Longline cables are attached to a variety of devices by using standard 15 and 25 pin RS-232-C connectors.

Longline Cable Installation Tips

Install Longline cables with the same regard for AC power lines and other sources of RF and EMI as you would any other shielded twisted pair cable.

**6600 SERIES
LONGLINE CABLE**



Installations

ICAT5e Industrial Ethernet (LAN-twisted pair) Cables are projected for widespread use on the factory floor due to sophisticated end-user applications. The cables must meet the same minimum Cat 5e specifications that are required of LAN cables. However, while located on the factory floor, they will be subjected to more harsh conditions than typical LAN cable.

The ICAT5e Cables are subjected to harsh conditions on the factory floor, such as varying levels of Electromagnetic Interference (EMI), UV exposure, fluids (oils, chemicals, etc.), extreme temperatures, physical movement, vibration, and physical damage due to the movement of other items in the area (forklifts, traffic, etc.). The Industrial Ethernet Cables are constructed of materials that reduce the effects of exposure to UV, fluids, and extreme temperatures. Interlocking armor or protective conduit decreases the potential for physical damage.

The ICAT5e Industrial Ethernet Cables are designed based on two levels of two environments (Noise & Flexure). CommScope offers four versions of the Industrial Ethernet Cables (2001-2004) which provide solutions to many combinations of noise (moderate, high) and flex (moderate, high) environments.

Cable Selection Matrix- Proper selection based on application, minimizes machine downtime.

A. Flex Life Requirement- based on machine life cycle or maintenance cycle.

- 1. Moderate Flex: 85,000 cycles
- 2. Hi-Flex: 4,000,000 cycles

*Minimum expected flex life per Commscope C-Track flex test, to Category 5e performance failure.

Commscope C-Track flex test-cable is flexed in a C-Track at the recommended installation minimum bend radius of 10x cable outer diameter at the rate of 1 cycle per second.

B. Noise Immunity Requirement- based on EMC Engineering evaluation.

- 1. Moderate Noise: suitable for unshielded cables. Assume 0dB shielding effectiveness baseline.
- 2. Hi-Noise: up to 50dB more shielding effectiveness.

Cable Selection Matrix

<div>Noise Environment</div> <div>Flex Environment</div>	Moderate Noise (0dB)	High Noise (50dB)
	2001 Solid Conductor No Shield	2003 2003B Solid Conductor Shield
Moderate Flex (85K cycles*)		
High Flex (4M cycles*)	2002 Stranded Conductor No Shield	2004 Stranded Conductor Shield

Profibus 9030 Series Purple Hose™

for Profibus - DP Networks





Shielded twisted pair cable specifically engineered for Profibus - DP systems

Meets all EN 50170 cable specifications. Tested and verified by Profibus Interface Center and Intertek Testing Services.

Solid conductors are tin coated for corrosion protection.

Available in a variety of configurations to meet your specific application

Cable-In-Conduit (CIC) versions are available






Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance nF/ft nF/m	Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
								MHz	dB/100'	dB/100m
9030 general purpose	.0259" Solid TC 16.0Ω/52.5Ω	Foam PE Red/Green .098/2.49	AL foil and TC braid 3.93Ω/12.89Ω	Purple PVC .315/8.00	8.84/29.0	78%	150Ω	9.6kHz	.76	2.5
								38.4kHz	1.22	4.0
								4	6.71	22.0
								16	12.80	42.0
										
CM/PLTC										
9030B direct burial	.0259" Solid TC 16.0Ω/52.5Ω	Foam PE Red/Green .098/2.49 flooded	AL foil and TC braid 3.93Ω/12.89Ω	Black PE .315/8.00	8.84/29.0	78%	150Ω	9.6kHz	.76	2.5
								38.4kHz	1.22	4.0
								4	6.71	22.0
								16	12.80	42.0
										
For Burial										

CommScope Blue Highway™ DH™, DH+™ Data Highway Plus™ Remote I/O™ for general, riser, plenum, burial and special applications



Twinaxial cables specifically engineered for DH™, DH+™ and Remote I/O™ systems
Available in a variety of configurations to meet your specific application
Cable-in-conduit (CIC) versions are available

Approved by Allen-Bradley as
Encompass Program Products

Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
								MHz	dB/100'	dB/100m
9022 Blue Highway™ general purpose  NEC/CEC CM	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω Drain wire: 7x28 AWG Tinned copper	PE Clear/blue .078/1.98	AL foil and 57% TC braid 4.1Ω/13.4Ω	Blue PVC .242/6.15	19.7/64.6	66%	78Ω	1	0.77	2.54
								10	1.76	5.80
								50	3.81	12.50
								100	5.56	18.26
								200	8.69	28.53
								400	12.58	41.28
9024 limited distance and special applications  NEC/CEC CM	24 AWG (7x32 AWG) Tinned Copper 24.6Ω/80.6Ω Drain wire: 7x32 AWG Tinned Copper	PE Clear/Blue .052/1.32	AL foil and 57% TC braid 6.65Ω/21.8Ω	Gray PVC .200/5.08	19.7/64.6	66%	78Ω	1	0.93	3.05
								10	3.09	10.14
								50	6.43	21.09
								100	10.65	34.93
								200	11.65	38.21
								400	11.97	39.26
9022D dual conductor  NEC/CEC CM	2x20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω Drain wire: 7x28 AWG Tinned copper	PE Clear/blue .078/1.98	Each leg AL foil and 57% TC braid 4.1Ω/13.4Ω	Blue PVC .242/6.15 by .500/12.7	19.7/64.6	66%	78Ω	1	0.77	2.54
								10	1.76	5.80
								50	3.81	12.50
								100	5.56	18.26
								200	8.69	28.53
								400	12.58	41.28
4022K plenum  NEC/CEC CMP	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω Drain wire: 7x28 AWG Tinned copper	FEP Clear/blue .075/1.90	AL foil and 85% TC braid 2.7Ω/8.9Ω	Clear Kynar .216/5.49	16.9/55.4	66%	78Ω	1	0.80	2.62
								10	2.10	6.89
								50	5.00	16.41
								100	7.50	24.61
								200	11.00	36.09
								400	16.00	52.50
9022B direct burial  Burial	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω Drain wire: 7x28 AWG Tinned copper	PE Clear/blue .078/1.98	AL foil and 57% TC braid 4.1Ω/13.4Ω	Black PE .242/6.15	19.7/64.6	66%	78Ω	1	0.77	2.54
								10	1.76	5.80
								50	3.81	12.50
								100	5.56	18.26
								200	8.69	28.53
								400	12.58	41.28





Unless specified, blue is the standard outer jacket color. Other colors subject to minimum order of 48,000 ft.

CommScope Blue Highway™ DH™, DH+™ Data Highway Plus™ Remote I/O for physically demanding applications



Twinaxial cables specifically engineered for DH™, DH+™ and Remote I/O™ systems
Armored, hi-flex and messengered constructions
Cable-in-conduit (CIC) versions are available

Approved by Allen-Bradley as
Encompass Program Products

Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
					pF/ft	pF/m			MHz	dB/100'	dB/100m
9022AI interlocked aluminum armor  NEC/CEC CM	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω	PE Clear/blue .078/1.98	AL foil and 57% TC braid 4.1Ω/13.4Ω	Inner: Blue PVC .242/6.15 Outer: Blue PVC .597/15.2	19.7	64.6	66%	78Ω	1	0.77	2.54
	Drain wire: 7x28 AWG Tinned copper		Protective Armor: Interlocked aluminum						10	1.76	5.80
									50	3.81	12.50
									100	5.56	18.26
									200	8.69	28.53
									400	12.58	41.28
9022SI interlocked galvanized steel armor  NEC/CEC CM	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω	PE Clear/blue .078/1.98	AL foil and 57% TC braid 4.1Ω/13.4Ω	Inner: Blue PVC .242/6.15 Outer: Blue PVC .597/15.2	19.7	64.6	66%	78Ω	1	0.77	2.54
	Drain wire: 7x28 AWG Tinned copper		Protective Armor: Interlocked galvanized steel						10	1.76	5.80
									50	3.81	12.50
									100	5.56	18.26
									200	8.69	28.53
									400	12.58	41.28
9022F hi-flex  NEC/CEC CM	20 AWG (42x36 AWG) Tinned copper 9.5Ω/31.2Ω	PE Clear/blue .078/1.98	AL foil and 85% TC braid 2.7Ω/8.9Ω	Blue PVC .242/6.15	19.7	64.6	66%	78Ω	1	0.82	2.68
	Drain wire: 7x28 AWG Tinned copper								10	2.05	6.74
									50	4.60	15.11
									100	6.87	22.55
									200	11.17	36.66
									400	17.51	57.45
9022M messengered  NEC/CEC CM	20 AWG (7x28 AWG) Tinned copper 9.5Ω/31.2Ω	PE Clear/blue .078/1.98	AL foil and 57% TC braid 4.1Ω/13.4Ω	Black PVC .242/6.15 by .298/7.57 galvanized steel messenger is .051/1.29	19.7	64.6	66%	78Ω	1	0.77	2.54
	Drain wire: 7x28 AWG Tinned copper								10	1.76	5.80
									50	3.81	12.50
									100	5.56	18.26
									200	8.69	28.53
									400	12.58	41.28

Unless specified, blue is the standard outer jacket color. Other colors subject to minimum order of 48,000 ft.

Quad-shielded RG6-styled cables engineered for ControlNet systems








Meets ControlNet International specifications

Available in a variety of configurations to meet your specific application

Cable-in-conduit (CIC) versions are available

Approved by Allen-Bradley as






Encompass Program Products

Part Number	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5060 general purpose 	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .034/.864	Black .300/7.62	16.0	52.5	82%	75Ω	1 2 5 10 20 50	0.36 0.38 0.45 0.59 0.86 1.38	1.18 1.25 1.48 1.94 2.82 4.53
NEC/CEC CMG												
5060D dual conductor 	(2) 18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .034/.864	Black .300/7.62 by .617/15.67	16.0	52.5	82%	75Ω	1 2 5 10 20 50	0.36 0.38 0.45 0.59 0.86 1.38	1.18 1.25 1.48 1.94 2.82 4.53
NEC/CEC CMG												
5060R riser 	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .034/.864	Black .300/7.62	16.0	52.5	82%	75Ω	1 2 5 10 20 50	0.36 0.38 0.45 0.59 0.86 1.38	1.18 1.25 1.48 1.94 2.82 4.53
NEC/CEC CMR												
5061/5061V plenum 	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam FEP .170/4.32	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	Kynar (5061) .014/.355 PVC (5061V) .016/.406	Clear .264/6.69 White 2.67/6.78	16.0	52.5	85%	75Ω	1 2 5 10 20 50	0.34 0.37 0.44 0.57 0.83 1.38	1.12 1.21 1.44 1.87 2.72 4.53
NEC/CEC CMP												
5060B direct burial 	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PE .032/.813 floodant	Black .297/7.54	16.0	52.5	82%	75Ω	1 2 5 10 20 50	0.36 0.38 0.45 0.59 0.86 1.38	1.18 1.25 1.48 1.94 2.82 4.53
NEC/CEC CMG												
5060IS intrinsically safe 	18 AWG Copper-covered steel 29.0Ω/95.1Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .034/.863	Lt. Blue .300/7.62	16.0	52.5	82%	75Ω	1 2 5 10 20 50	0.36 0.38 0.45 0.59 0.86 1.38	1.18 1.25 1.48 1.94 2.82 4.53
NEC/CEC CMG												
5065 limited distance special applications 	24 AWG Solid Copper 26.3Ω/86.3Ω	Foam PE .095/2.41	95% TC braid and 95% TC braid 3.2Ω/10.5Ω	PVC .013/.33	Lt. Gray .155/54.1	16.0	52.5	82%	75Ω	1 5 10 25 50	0.37 0.88 1.26 1.95 2.98	1.21 2.89 4.13 6.40 9.78
NEC/CEC CMR												

Other colors subject to minimum order of 48,000 ft.

Quad-shielded RG6-styled cables engineered for ControlNet systems
Meets ControlNet International Specifications
Armored, burial and flexible constructions
Cable-in-conduit (CIC) versions are available







Approved by Allen-Bradley as
Encompass Program Products

Part Number	Conductor Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & OD in / mm.	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100m
5060A Armored Direct Burial  Corrugated steel armor	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω Protective Armor: Corrugated steel	Inner: Black PE .032/.813 Outer: Black PE jacket/armor .052/1.32	Black armored OD .400/10.2 connector OD .297/7.54	16.0	52.5	82%	75Ω	1	0.36	1.18
										2	0.38	1.25
										5	0.45	1.48
										10	0.59	1.94
										20	0.86	2.82
										50	1.38	4.53
5060AI interlocked aluminum armor  NEC/CEC CMG	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω Protective Armor: Interlocked AL	Inner: Black PVC .034/.864 Outer: Blue PVC jacket/armor .153/3.87	Blue armored OD .605/15.4 connector OD .300/7.62	16.0	52.5	82%	75Ω	1	0.36	1.18
										2	0.38	1.25
										5	0.45	1.48
										10	0.59	1.94
										20	0.86	2.82
										50	1.38	4.53
5060SI interlocked galvanized steel armor  NEC/CEC CM	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω Protective Armor: Interlocked galvanized steel	Inner: Black PVC .034/.864 Outer: Blue PVC jacket/armor .153/3.87	Blue armored OD .605/15.4 connector OD .300/7.62	16.0	52.5	82%	75Ω	1	0.36	1.18
										2	0.38	1.25
										5	0.45	1.48
										10	0.59	1.94
										20	0.86	2.82
										50	1.38	4.53
5060F hi-flex  NEC/CEC CMG	20 AWG Stranded (7x15/40 AWG) bare copper 10.2Ω/33.5Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .034/.864	Black .300/7.62	16.0	52.5	82%	75Ω	1	0.21	0.69
										2	0.34	1.11
										5	0.81	2.66
										10	1.35	4.43
										20	1.98	6.49
										50	3.26	10.69
5060M messengered  NEC/CEC CM	18 AWG Copper-covered steel 28.6Ω/93.8Ω	Foam PE .180/4.57	AL foil, 60% AL braid, AL foil and 40% AL braid 3.9Ω/12.8Ω	PVC .033/.838 galvanized steel messenger is .051/1.29	Black .297/7.54 by .438/11.1	16.0	52.5	82%	75Ω	1	0.36	1.18
										2	0.38	1.25
										5	0.45	1.48
										10	0.59	1.94
										20	0.86	2.82
										50	1.38	4.53

Other colors subject to minimum order of 48,000 ft.

Shielded data/power pairs engineered specifically for DeviceNet
Meets Open DeviceNet Vendors Association (ODVA) specifications
Cable-in-conduit (CIC) versions are available

Approved by Allen-Bradley as
Encompass Program Products

Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Nom Attenuation		
					pF/ft	pF/m			MHz	dB/100'	dB/100m
5070 trunk cable (thick) 	Data pair: 18 AWG (19x30 AWG) TC 6.9Ω/22.7Ω	Data: Foam PE Blue/white .150/3.81	Each pair: AL foil 100% Overall: 65% TC braid 1.75Ω/5.7Ω	Gray PVC .480/12.2	12.0	39.4	78%	120Ω	.125 .500 1.000	0.13 0.25 0.40	0.41 0.82 1.31
	Power pair: 15 AWG (19x28 AWG) TC 3.6Ω/11.8Ω	Power: PVC Black/red .098/2.49									
NEC/CEC PLTC SUN RES											
5080 drop cable (thin) 	Data pair: 24 AWG (19x36 AWG) TC 28Ω/91.8Ω	Data: Foam PE Blue/white .077/1.96	Each pair: AL foil 100% Overall: 65% TC braid 3.2Ω/10.5Ω	Gray PVC .275/7.0	12.0	39.4	78%	120Ω	.125 .500 1.000	0.29 0.50 0.70	0.95 1.64 2.30
	Power pair: 22 AWG (19x34 AWG) TC 17.5Ω/57.4Ω	Power: PVC Black/red .055/1.40									
NEC/CEC CM/CL2 SUN RES											
5070CP trunk cable (thick) chemical/oil resistant 	Data pair: 18 AWG (19x30 AWG) TC 6.9Ω/22.7Ω	Data: Foam PE Blue/white .150/3.81	Each pair: AL foil 100% Overall: 65% TC braid 1.75Ω/5.7Ω	Yellow CPE .480/12.2	12.0	39.4	78%	120Ω	.125 .500 1.000	0.13 0.25 0.40	0.41 0.82 1.31
	Power pair: 15 AWG (19x28 AWG) TC 3.6Ω/11.8Ω	Power: PVC Black/red .098/2.49									
NEC/CEC CM/CL2 DIR BUR											
5080CP drop cable (thin) chemical/oil resistant 	Data pair: 24 AWG (19x36 AWG) TC 28Ω/91.8Ω	Data: Foam PE Blue/white .077/1.96	Each pair: AL foil 100% Overall: 65% TC braid 3.2Ω/10.5Ω	Yellow CPE .275/7.0	12.0	39.4	78%	120Ω	.125 .500 1.000	0.29 0.50 0.70	0.95 1.64 2.30
	Power pair: 22 AWG (19x34 AWG) TC 17.5Ω/57.4Ω	Power: PVC Black/red .055/1.40									
NEC/CEC CM/CL2 DIR BUR											
5070AI trunk cable (thick) interlocked aluminum armor 	Data pair: 18 AWG (19x30 AWG) TC 6.9Ω/22.7Ω	Data: Foam PE Blue/white .150/3.81	Each pair: AL foil 100% Overall: 65% TC braid 1.75Ω/5.7Ω	Inner: Gray PVC Outer: Blue PVC	12.0	39.4	78%	120Ω	.125 .500 1.000	0.13 0.25 0.40	0.41 0.82 1.31
	Power pair: 15 AWG (19x28 AWG) TC 3.6Ω/11.8Ω	Power: PVC Black/red .098/2.49	Protective Armor: Interlocked AL								
NEC/CEC CM											
5080AI drop cable (thin) interlocked aluminum armor 	Data pair: 24 AWG (19x36 AWG) TC 28Ω/91.8Ω	Data: Foam PE Blue/white .077/1.96	Each pair: AL foil 100% Overall: 65% TC braid 3.2Ω/10.5Ω	Inner: Gray PVC Outer: Blue PVC	12.0	39.4	78%	120Ω	.125 .500 1.000	0.29 0.50 0.70	0.95 1.64 2.30
	Power pair: 22 AWG (19x34 AWG) TC 17.5Ω/57.4Ω	Power: PVC Black/red .055/1.40	Protective Armor: Interlocked AL								
NEC/CEC CM											

Allen-Bradley DH-485™


for DH - 485 networks



1.5 pair foil/braid cables engineered specifically for DH-485

Common reference line is located outside of the foil but within the braid

Cable-in-conduit (CIC) versions are available



Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance pF/ft * pF/m*	Nominal Velocity of Propagation	Nominal Impedance
5090 1.5 Pair Riser  NEC/CEC CMR	22 AWG (7x30 AWG) TC 14.7Ω/48.2Ω Drain wire: 22 AWG (7x30 AWG) TC	Foam PE blue w/ white stripe and white w/ blue stripe .070/1.77	AL foil 100% coverage over data pair Overall: 90% TC braid 2.9Ω/9.5Ω	Black PVC .300/7.62	11.0* 36.1* 20.0† 65.6†	78%	120Ω

Allen-Bradley Longline Cables

for interconnection of Allen-Bradley interface modules

Pairs are individually shielded for extra protection from crosstalk and RF interference

Cable-in-conduit (CIC) versions are available

Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Color & Type Cable OD in / mm	Nominal Capacitance pF/ft * pF/m*	Drain Wire Size & Type Nom DCR kft / km	Nominal Velocity of Propagation
6600 Riser  NEC/CEC CMR	22 AWG (7x30 AWG) TC 14.7Ω/48.2Ω	PE Red/Black White/Green .050/1.27	AL foil over each pair	Gray PVC .165/4.19	33* 108* 60† 196†	24 AWG (7X32 AWG) TC 23.3Ω/76.4Ω	66%
6600TK Plenum  NEC/CEC CMP	22 AWG (7x30 AWG) TC 14.7Ω/48.2Ω	FEP Red/Black White/Green .052/1.32	AL foil over each pair	White Plenum PVC .160/4.06	31* 102* 59† 194†	24 AWG (7X32 AWG) TC 23.3Ω/76.4Ω	69.5%






*denotes capacitance between conductors †denotes capacitance between one conductor and other conductor connected to the shield

ICAT 5e Industrial Ethernet Cables



For moderate and high levels of noise and flex “industrial” environments

Gigabit Ethernet /155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet Applications
Exceeds/meets ANSI/TIA/EIA/ 568B.2 Category 5e, CENELEC EN50173, ICEA S-90-661,
NEMA Low-loss Extended Frequency, AS/NZS 3085.1 and ISO/IEC 11801

Part Number	Conductors Size & Type Max DCR kft/km	Dielectric Type Nom OD in / mm	Shields Type & Coverage kft / km	Jacket Color & Type Cable OD in / mm.	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Maximum Attenuation	
								MHz	dB/100m
2001 Moderate Noise Moderate Flex UV/Oil Resistant  NEC/CEC CMR/CL2R SUN RES/OIL RES II	8-24 AWG Solid BC 28.6Ω/93.8Ω	PE .036/.92	None	Outer Jacket: Teal or Gray PVC .231/5.9 Inner Jacket: .195/4.9	14/46	68%	100Ω	1	2.0
								10	6.5
								20	9.3
								100	22.0
2002 Moderate Noise High Flex UV/Oil Resistant  NEC/CES CMR/CL2R SUN RES/OIL RES II	8-24 AWG Stranded TC 28.6Ω/93.8Ω	PE .040/1.02	None	Outer Jacket: Teal or Gray PVC .256/6.5 Inner Jacket: .218/5.5	14/46	67%	100Ω	1	2.0
								10	6.5
								20	9.3
								100	22.0
2003 High noise Moderate flex UV/Oil Resistant  NEC/CEC CMR/CL2R SUN RES/OIL RES II	8-24 AWG Solid BC 28.6Ω/93.8Ω Drain 24 AWG Stranded TC	PE .040/1.02	AL/PET Tape 100% Coverage	Teal or Gray PVC .250/6.4	14/46	71%	100Ω	1	2.0
								10	6.5
								20	9.3
								100	22.0
2003B High noise High flex UV/Oil Resistant  NEC/CEC CMR/CL2R SUN RES/OIL RES II	8-24 AWG Stranded TC 28.6Ω/93.8Ω	PE .040/1.05	AL/PET Tape 100% Coverage Braid TC 65% Coverage	Outer Jacket: Teal or Gray PVC .290/7.4 Inner Jacket: .205/5.2	14/46	71%	100Ω	1	2.0
								10	6.5
								20	9.3
								100	22.0
2004 High noise High flex UV/Oil Resistant  NEC/CEC CMR/CL2R SUN RES/OIL RES II	8-24 AWG Solid BC 28.6Ω/93.8Ω	PE .040/1.02	AL/PET Tape 100% Coverage Braid TC 65% Coverage	Outer Jacket: Teal or Gray PVC .280/7.1 Inner Jacket: .225/5.7	14/46	71%	100	1	2.0
								10	6.5
								20	9.3
								100	22.0



Industrial

Ultra II Category 5e+ Twisted Pair Cables



for ANSI/TIA/EIA 568B Category 5e extended frequency LANs for low noise factory offices

Gigabit Ethernet /155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet Applications
Exceeds/meets ANSI/TIA/EIA/ 568B.2 Category 5e, CENELEC EN50173, ICEA S-90-661,
NEMA Low-loss Extended Frequency, AS/NZS 3085.1 and ISO/IEC 11801

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
5504M  NEC/ CEC CMP	4	24 AWG Solid BC	FEP (Teflon) .007/.19 and FRPE .008/.20	CommFlex .016/.40	.190/4.8 White, blue, yellow, pink and gray*	14	100Ω ± 15Ω	28.6Ω/kft 9.4Ω/100m	71%	25/82
55N4R  NEC/CEC CMR/CMG	4	24 AWG Solid BC	PE .008/.20	FR PVC (Flame-Retardant PolyVinyl Chloride) .022/0.6	.195/4.9 White, blue, yellow, pink and gray*	14	100Ω ± 15Ω	28.6Ω/kft 9.4Ω/100m	68%	24/78


*Colors other than these require a minimum order of 48,000 ft

UltraMedia Category 6 Twisted Pair Cables


For low noise factory office applications

Broadband vimeo, Gigabit Ethernet, 155 Mb/s ATM, 100 Mb/s TP-PMD/CDDI and Fast Ethernet Applications
Exceeds/meets ANSI/TIA/EIA/ 568B.2 Category 5e, 568-B.2.1 Category 6, NEMA 66-1999 Category 6
NEMA Low-loss Extended Frequency, AS/NZS 3085.1 and ISO/IEC 11801

Plenum

Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
7504  NEC/CEC CMP	4	23 AWG Solid BC	3prs: FEP .008/.20	CommFlex .015/.38	.250/6.3 CommScope green, white and blue*	14	100Ω ± 15Ω	20.3Ω/kft 6.7Ω/100m	71%	28/92

Non-plenum





Part Number	No. of Pairs	Conductor Size and Material	Insulation Type & Thickness in / mm	Cable Jacket Material & Thickness in / mm	Cable Jacket OD and colors in / mm.	Nominal Capacitance pF/ft	Characteristic Impedance	Maximum DCR	Velocity of Propagation	Shipping Wt. in lbs. kft / km
75N4  NEC/CEC CMR/CMG	4	24 AWG Solid BC	PE .008/.20	Flame-retardant PVC .020/.51	.240/6.1 White blue, and gray*	14	100Ω ± 15Ω	20.3Ω/kft 6.7Ω/100m	68%	26/85



DEC/Ethernet™ IEEE 802.3

for trunk, drop and transceiver applications



DEC part numbers designed for optimum performance in all DEC Ethernet applications
 Transceiver pairs are individually shielded for extra protection from crosstalk and RF interference
 Cable-in-conduit (CIC) versions are available

Part Number	Conductors Size & Type Nom DCR kft / km	Dielectric Type Nom OD in / mm	Shields Type & Coverage Nom DCR kft / km	Jacket Type & Thickness in / mm	Cable Color & OD in / mm.	Nominal Capacitance pF/ft pF/m		Nom Vel. of Prop.	Nom Imp.	Nom Attenuation MHz dB/100' dB/100m		
3250 trunk DEC #17-00451 	12 AWG Solid bare copper 1.4Ω/4.6Ω	Foam PE .247/6.27	AL foil, 90% TC braid, AL foil and 90% TC braid 1.2Ω/3.9Ω	PVC .040/1.01	Yellow or blue .405/10.3	25.5	85.3	78%	50Ω	1	0.17	0.56
										10	0.52	1.71
										50	1.20	3.94
										100	1.80	5.91
										200	2.55	8.35
										400	3.60	11.81
										700	4.76	15.63
										900	5.40	17.72
										1000	5.69	18.68
										NEC/CEC CMG		
2280K trunk DEC #17-00324 	13 AWG Solid bare copper 1.4Ω/4.6Ω	Foam FEP .247/6.27	AL foil, 90% TC braid, AL foil and 90% TC braid 0.9Ω/3.0Ω	Kynar .020/.508	Blue or orange .366/9.30	26.2	85.9	78%	50Ω	1	0.18	0.62
										10	0.52	1.71
										50	1.20	3.84
										100	1.70	5.58
										200	2.55	8.37
										400	3.90	12.80
										700	5.50	18.05
										900	6.50	21.33
										1000	6.90	22.64
										NEC/CEC CMP		
3104 drop DEC #17-01248 	20 AWG (19x32 AWG) Tinned copper 10.1Ω/33.3Ω	Foam PE .101/2.57	AL foil and 93% TC braid 4.2Ω/13.9Ω	PVC .026/.660	White .183/4.67	25.0	82.0	78%	50Ω	1	0.44	1.44
										10	1.40	4.59
										50	2.90	9.51
										100	4.20	13.78
										200	6.10	20.00
										400	8.90	29.19
										700	12.10	39.69
										900	13.90	45.59
										1000	14.80	48.54
										NEC/CEC CMG riser version available		
2104K/2104V drop DEC #17-01246 	20 AWG (19x32 AWG) Tinned copper 9.0Ω/29.5Ω	Foam FEP .101/2.57	AL foil and 95% TC braid 4.2Ω/13.9Ω	Kynar (K) PVC (V) .016/.406	Clear (K) White (V) .161/4.09	27.0	88.6	78%	50Ω	1	0.43	1.41
										10	1.30	4.27
										50	2.90	9.51
										100	4.20	13.78
										200	6.10	20.00
										400	8.90	29.20
										700	12.10	39.70
										900	13.90	45.61
										1000	14.80	48.56
										NEC/CEC CMP		

Part Number	Conductors Size & Type Nom DCR kft / km	Insulation Type & Color Conductor OD in / mm	Shields Type & Coverage	Jacket Color & Type Cable OD in / mm	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Nom Attenuation MHz dB/100' dB/100m		
9050 transceiver DEC #17-01320 	4 pr/20 AWG (7x28 AWG) TC 10.4Ω/34.1Ω Drain wire: 20 AWG (7x28 AWG) TC 10.4Ω/34.1Ω	Data: FPE .078/1.98 gray/white yellow/orange blue/green Power: PVC .062/1.57 red/black	Each pair: AL foil Overall: 94% TC braid	Light gray PVC .405/10.29	19.7 64.6	78%	78Ω	10	1.83	6.00
NEC/CEC CL2										
4050K transceiver DEC #17-01319 	4 pr/20 AWG (7x28 AWG) TC 10.4Ω/34.1Ω Drain wire: 20 AWG (7x28 AWG) TC 10.4Ω/34.1Ω	Data: FPE .078/1.98 gray/white yellow/orange blue/green Power: PVC .060/1.52 red/black	Each pair: AL foil Overall: 94% TC braid	Kynar .365/9.27	19.7 64.6	78%	78Ω	10	1.83	6.00
NEC/CEC CMP										

*denotes capacitance between conductors †denotes capacitance between one conductor and other conductor connected to the shield

CommScope Fiber Optic Cables

Partial listing of cables for industrial use



Networks that run over very long distances or operate in environments with very high levels of electromagnetic interference (EMI) can benefit from the use of fiber optic cable. Example: the total length of a ControlNet network can be increased from a maximum length of 5 km to over 30 km by using fiber optic trunk cable.

Contact your CommScope sales representative to get information about fiber optic cable tailored to your specific application.

Outside Plant Fiber Feeder®


Armored designs for buried/underground/aerial use

PE jacket/armored constructions offers excellent protection of fibers

62.5/125µm ULTRA and FDDI fiber grades perfect for industrial applications/ Single mode fiber available

Interlocking armor and cable-in-conduit (CIC) versions are available

For the complete range of optical cables, ask your salesperson for our Fiber Optic catalog.

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Installation Loading lbs/newtons	Crush Resistance N/mm	Impact Resistance 25 Impacts	Weight lbs/ 1000'	kg/ 1000m
Fiber Feeder Armored 2 - 24 Fiber	O-XXX-FA-XY-F12NS	.36/9.3	7.3/18.5	3.6/9.2	400/1800	440	3 N•m	67	100
	Non Armored Version Available.								
Singlemode/Multimode Composite (4 - 24 fiber)	O-XXX-FS-CM-F12/8Haaa/XYbbb								

Variables in the Catalog Number:

XXX= Total Number Count

XY = Fiber Grade

8H (8.3/125µm singlemode/High-performance grade)

6U (62.5/125µm graded index/ULTRA grade)

6F (62.5/125µm graded index/FDDI grade)

5H (50/125µm graded index/High-performance grade)

For Composites Only:

aaa is replaced with singlemode fiber count

bbb is replaced with multimode fiber count

Fiber & Binder Thread identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Indoor/Outdoor Fiber Feeder®

Perfect for riser and outdoor applications


Meets critical NEC riser (OFNR) safety standards yet rugged enough for outdoor use

Standard color-coding on fibers helps ease installation

62.5/125µm ULTRA and FDDI fiber grades perfect for industrial applications/ Single mode fiber available.

Interlocking armor and cable-in-conduit (CIC) versions are available

For the complete range of optical cables, ask your salesperson for our Fiber Optic catalog.

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Long term lbs./Newtons	Weight lbs/ 1000'	kg/ 1000m
Fiber Feeder 2 - 24 fibers	R-XXX-FN-XY-F12BK	.39/9.9	7.8/19.8	3.9/9.9	300/1350	90/400	75	112
								
NEC/CEC OFNR								
Singlemode/Multimode Composite (4 - 24 fiber)	R-XXX-FN-CM-F12BK/8Haaa/XYbbb							

Variables in the Catalog Number:

XXX= Total Number Count

XY = Fiber Grade

8H (8.3/125µm singlemode/High-performance grade)

6U (62.5/125µm graded index/ULTRA grade)

6F (62.5/125µm graded index/FDDI grade)

5H (50/125µm graded index/High-performance grade)

For Composites Only:

aaa is replaced with singlemode fiber count

bbb is replaced with multimode fiber count

Fiber & Binder Thread identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

CommScope offers a broad range of fiber optic cables geared for buried, aerial, indoor/outdoor, riser and plenum applications. Ask your CommScope salesperson for our complete Optical Reach® catalog.

Triathlon™ Indoor/Outdoor Distribution

Low smoke - zero halogen jackets for outdoor and riser usage



Meets critical NEC/CEC riser (OFNR) safety standards yet rugged enough for outdoor use
 62.5/125μm ULTRA and FDDI fiber grades perfect for industrial applications/ Single mode fiber available.
 Low-smoke zero-halogen jackets protect building occupants and equipment
 Interlocking armor and cable-in-conduit (CIC) versions are available

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./Newtons	Weight lbs/1000'	Weight kg/1000m
4 Fiber (no central member)	Z-ØØ4-DS-XY-FSDBK	.16/4.0	3.2/8.0	1.6/5.5	300/1350	100/445	15	22
6 Fiber	Z-ØØ6-DS-XY-FSDBK	.21/5.3	4.2/10.6	2.1/5.3	300/1350	100/445	20	30
8 Fiber	Z-ØØ8-DS-XY-FSDBK	.25/6.4	5.0/12.8	2.5/6.4	300/1350	100/445	24	35
12 Fiber	Z-Ø12-DS-XY-FSDBK	.29/7.4	5.8/14.8	2.9/7.4	400/1800	140/600	38	56
NEC/CEC OFNR								

Variables in the Catalog Number:

XXX= Total Number Count

XY = Fiber Grade

8H (8.3/125μm singlemode/High-performance grade)

6U (62.5/125μm graded index/ULTRA grade)

6F (62.5/125μm graded index/FDDI grade)

5H (50/125μm graded index/High-performance grade)

Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Triathlon™ Indoor/Outdoor Cordage

Low smoke - zero halogen jackets for outdoor and riser usage

Meets critical NEC riser (OFNR) safety standards yet rugged enough for outdoor use
 62.5/125μm ULTRA and FDDI fiber grades perfect for industrial applications/ Single mode fiber available
 Low-smoke zero-halogen jackets protect building occupants and equipment
 For the complete range of optical cables, ask your salesperson for our Fiber Optic catalog.

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Bend Radius Loaded inch/cm	Min. Bend Radius Unloaded inch/cm	Max. Tensile Load Short term lbs./ Newtons	Max. Tensile Load Long term lbs./Newtons	Weight lbs/1000'	Weight kg/1000m
Simplex 2.0mm	Z-ØØ1-SP-XY-F2ØBK	0.08/2.0	1.8/4.6	0.9/2.3	50/225	16/71	3.0	4.5
Duplex	Z-ØØ2-DU-XY-F25BK	0.13/3.3 x 0.23/5.8	2.6/6.6	1.3/3.3	90/400	30/133	13.5	20.1
Zipcord 2.5mm	Z-ØØ2-ZC-XY-F25BK	0.10/2.5 x 0.21/5.4	2.0/5.1	1.0/2.5	90/400	30/133	11.9	17.7
2 fiber interconnect	Z-ØØ2-IC-XY-FSDBK	.14/36	2.8/7.2	1.4/3.6	270/1200	90/400	10.6	15.8
NEC/CEC OFNR								

Variables in the Catalog Number:

XY = Fiber Grade

8H (8.3/125μm singlemode/High-performance grade)

6U (62.5/125μm graded index/ULTRA grade)

6F (62.5/125μm graded index/FDDI grade)

5H (50/125μm graded index/High-performance grade)

Fiber identification colors: 1/Blue, 2/White

For the complete range of optical cables, ask your salesperson for our Fiber Optic catalog.

Industrial

Rugged Interlock Armor with optional outer jacket



Interlock Armor is available on a wide range of CommScope cables. Interlock Armor is made to order with short minimum order lengths and quick order turn around, making it a very economical choice.

Benefits:

- Outstanding mechanical protection for sensitive cables combined with excellent flexibility
- Reduces data transmission loss/failures caused by accidental cut through or crushing, mechanical vibration and rub through damage via adjacent cables moves and changes.
- Security: Ideal for cabling applications which transmit critical data

Features:

- Protection
 - Available in steel or aluminum interlock armor
 - Meets CSA 51 Armored Cable requirements
 - Sunlight (UV) Resistant rated
- Flame Rating
 - CM and CMG/FT4 rated. Riser and plenum ratings available
 - Meets UL444 and CSA-214-94 Communications Cable Requirements
- Outer jacket features:
 - Color coded for easy cable zoning and identification
 - Custom printing for ease of identification
 - Sequential length marking in foot or meter

Applications:

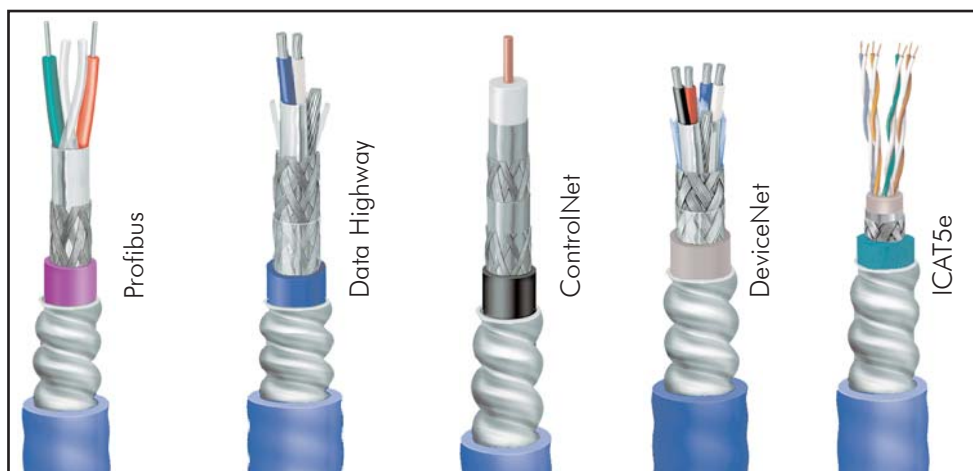
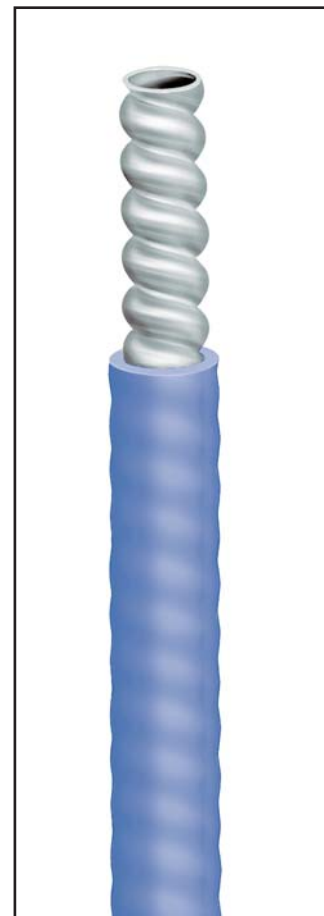
- Local Area Networks
- Factory Automation
- Critical Data Lines
- Video, Robotics

Typical Locations:

- Commercial construction and renovations: schools, health care, factory floor, OEMs
- Heavy industry: mining, pulp & paper, petro-chemical
- High security areas: hospitals, military installations, financial centers, casinos
- Outdoor and indoor applications

Approvals:

- UL/CSA approved for a wide range of CommScope cables



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Abrasion Resistance Ability of a wire, cable or material to resist surface wear.

Accelerated Aging A test in which voltage, temperature, etc., are increased above normal operation values to obtain observable deterioration in a relatively short period of time. The plotted results give expected service life under normal conditions.

Access Provider Operator of facility used to convey telecommunications signals to and from a customer premises.

AD Cable In residential applications, the cable from the distribution device in a customer's premises to the point of demarcation.

Admittance The measure of the ease with which an alternating current flows in a circuit. The reciprocal of impedance.

Aerial Cable A cable suspended in the air on poles or other overhead structure.

Air-Dielectric Coaxial Cable One in which air is the essential dielectric material. A spirally wound synthetic filament or spacer may be used to center the conductor.

Alloy A metal formed by combining two or more different metals to obtain desirable properties.

Alternation Current Electric current that continually reverses its direction. It is expressed in cycles per second (Hertz or Hz).

Ambient Temperature The temperature of a medium (gas or liquid) surrounding an object.

American Wire Gauge (AWG) A standard system for designation wire diameter. Also referred to as the Brown and Sharpe (B&S) wire gauge.

Ampere The unit of current. One ampere is the current flowing through one ohm of resistance at one volt potential.

Anneal Relief of mechanical stress through heat and gradual cooling. Annealing copper renders it less brittle.

ANSI/TIA/EIA 568A Commercial Building Telecommunications Standard. It gives guidelines on implementing structured cabling within a building. It also defines the minimum mechanical and transmission performance criteria for UTP, STP, ScTP, coax, and fiber optic cabling.

Armor A braid or wrapping of metal, usually steel, used for mechanical protection. Generally placed over the outer sheath.

ASTM Abbreviation for the American Society for Testing and Materials, a nonprofit industry-wide organization which publishes standards, methods of test, recommended practices, definitions and other related material.

Asynchronous Transfer Mode (ATM) An information transmission technology that dynamically allocates bandwidth through a switching network. ATM can deliver voice, video and data without the latency problems normally associated with Ethernet.

Attenuation Power loss in an electrical system. In cables, generally expressed in dB per unit length, usually 100 ft.

Attenuation to Crosstalk Ratio (ACR) Calculated as the crosstalk value (dB) minus the attenuation value (dB). Typically, ACR may be given for a cable, link or channel and is a key indicator of performance for UTP systems.

Audio Frequency The range of frequencies audible to the human ear. Usually 20-20,000 Hz.

Auxiliary Disconnect Outlet (ADO) Allows a disconnect point from the service provider. May be co-located at the NID or Distribution Device.

AWG Abbreviation for American Wire Gauge.

AWM Designation for Appliance Wiring Material.

Balanced Transmission Refers to the transmission of equal but opposite voltages across each conductor of a pair. If each conductor is identical, with respect to each other and the environment, then the pair is said to be perfectly balanced and the transmission will be immune to ElectroMagnetic Interference (EMI).

Bandwidth A measure of the information-carrying capacity of a communication channel. For UTP, the bandwidth is sometimes defined as the frequency at which the ACR equals zero.

Braid A fibrous or metallic group of filaments interwoven in cylindrical form to form a covering over one or more wires.

Braid Angle The smaller of the two angles formed by the shielding strand and the axis of the cable being shielded.

Braid Carrier A spool or bobbin on a braider which holds one group of strands or filaments consisting of a specific number of ends. The carrier revolves during braiding operations.

Braid Ends The number of strands used to make up one carrier. The strands are wound side by side on the carrier bobbin and lie parallel in the finished braid.

Breakdown Voltage The voltage at which the insulation between two conductors breaks down.

Bunch Stranding A group of wires of the same diameter twisted together without a predetermined pattern.

Buried Cable A cable installed directly in the earth without use of underground conduit. Also called "direct burial cable."

Cable An insulated conductor, or group of individually insulated conductors in twisted or parallel configuration.

Cable Assembly A completed cable and its associated hardware ready to install.

Cabling The twisting together of two or more insulated conductors to form a cable.

Cabling Factor Used in the formula for calculation the diameter of an unshielded, unjacketed cable. $D = Kd$, where D is the cable diameter, K is the factor and d is the diameter of one insulated conductor.

Capacitance The ratio of the electrostatic charge on a conductor to the potential difference between the conductors required to maintain that charge.

Capacitance Unbalance A measurement of a cable's impedance based on a curve fit equation using the cable's raw input impedance. Specified by ANSI/TIA/EIA 568A but not ISO/IEC11801.

Characteristic Impedance The impedance that, when connected to the output terminals of a transmission line of any length, makes the line appear infinitely long. The ratio of voltage to current at every point along a transmission line on which there are no standing waves.

Circular Mil The area of a circle one mil (.001") in diameter; 7.854×10^{-7} sq. in. Used in expressing wire cross sectional area.

Cladding A method of applying a layer of metal over another metal whereby the junction of the two metals is continuously welded.

Coaxial Cable A cable consisting of two cylindrical conductors with a common axis, separated by a dielectric.

Color Code A system for circuit identification through use of solid colors and contrasting tracers.

Concentric Stranding A central wire surrounded by one or more layers of helically wound strands in a fixed geometric arrangement.

Concentricity In a wire or cable, the measurement of the location of the center of the conductor with respect to the geometric center of the surrounding insulation.

Conductivity The capability of a material to carry electrical current—usually expressed as a percentage of copper conductivity (copper being 100%).

Conductor An uninsulated wire suitable for carrying electrical current.

Conduit A tube or trough in which insulated wires and cables are run.

Connector A device used to physically and electrically connect two or more conductors.

Continuity Check A test to determine whether electrical current flows continuously throughout the length of a single wire or individual wires in a cable.

Copolymer A compound resulting from the polymerization of two different monomers.

Core In cables, a component or assembly of components over which additional components (shield, sheath, etc.) are applied.

Coverage The percent of completeness with which a metal braid covers the underlying surface.

Crazing The minute cracks on the surface of plastic materials.

Crosstalk A measure of conductor uniformity within a pair, hence the cable's balance. The lower the unbalance, the better the cable will support balanced transmission.

CSA Abbreviation for Canadian Standards Association, a non-profit, independent organization which operates a listing service for electrical and electronic materials and equipment. The Canadian counterpart of the Underwriters Laboratories.

Cut-Through Resistance The ability of a material to withstand mechanical pressure, usually a sharp edge or small radius, without separation.

DD Cord Telecommunications cord that extends between the distribution device and the auxiliary disconnect outlet.

Decibel (dB) A unit to express differences of power level. Used to express power gain in amplifiers or power loss in passive circuits or cables.

Demarcation Point A point where operational control or ownership changes.

Dielectric Any insulating material between two conductors which permits electrostatic attraction and repulsion to take place across it.

Dielectric Constant (K) The ratio of the capacitance of a condenser with dielectric between the electrodes to the capacitance when air is between the electrodes. Also called Permittivity and Specific Inductive Capacity.

Dielectric Strength The voltage which an insulation can withstand before breakdown occurs. Usually expressed as a voltage gradient (such as volts per mil).

Direct Current Resistance (DCR) The resistance offered by any circuit to the flow of direct current.

Dissipation Factor The tangent of the loss angle of the insulation material. (Also referred to as loss tangent, $\tan \delta$, and approximate power factor.)

Distribution Device (DD) Terminates and cross-connects cables. Central point of connection for all building cables.

Drain Wire In a cable, the uninsulated wire laid over the component or components and used as a ground connection.

Eccentricity Like concentricity, a measure of the center of a conductor's location with respect to the circular cross section of the insulation. Expressed as a percentage of displacement of one circle within the other.

Electromagnetic Interference (EMI) The interference in signal transmission resulting from the radiation of nearby electrical and/or magnetic fields. For UTP, EMI can be coupled onto a conducting pair and cause circuit noise. Crosstalk is one type of EMI.

Elongation The fractional increase in length of a material stressed in tension.

EMI Abbreviation for electromagnetic interference.

Ends In braiding, the number of essentially parallel wires or threads on a carrier.

Equal Level Far End Crosstalk (ELFEXT) A method to mathematically subtract out the cable's attenuation in order to accurately compare FEXT values from one cable to another. See FEXT.

Equipment Cord Cable used to connect telecommunications equipment to horizontal or backbone cabling.

Ethernet A LAN transmission standard originally developed by IEEE 802.3. Ethernet is a shared bandwidth technology based on bus topology and CSMA/CD. Ethernet has evolved from its beginning as a 10 Mb/s coax network (10Base5) to include a 10 Mb/s twisted pair standard (10BaseT), a 100 Mb/s 4 pair/twisted pair standard (100BaseVG), 100 Mb/s over 2 pair/twisted pair standard (100Base - x) and a draft standard for gigabit transmission over twisted pair.

Far End Crosstalk (FEXT) Crosstalk that occurs at the end opposite the location of the disturbed pair's receiver. Normally, FEXT is only important in short links or full duplex transmission.

Figure 8 Cable An aerial cable configuration in which the conductors and the steel strand which supports the cable are integrally jacketed. A cross section of the finished cable approximates the figure "eight."

Flame Resistance The ability of a material not to propagate flame once the heat source is removed.

Flex Life The measurement of the ability of a conductor or cable to withstand repeated bending.

FR-1 A flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designed vertical flame test. This designation has been replaced by VW-1.

Full Duplex Simultaneous two-way transmission across a communication channel. A method used to increase transmission throughput e.g. gigabit Ethernet where 250 Mb/s is sent bi-directionally across each of the four pairs.

Gauge (AWG) A term used to denote the physical size of a wire.

Giga A numerical prefix denoting one billion (10^9).

Ground A conduction connection between an electrical circuit and the earth or other large conduction body to serve as an earth thus making a complete electrical circuit.

Hard Drawn Copper Wire Copper wire that has not been annealed after drawing. Sometimes called HD wire.

Hertz (Hz) A term replacing cycles-per-second as an indication of frequency.

Hi-Pot A test designed to determine the highest voltage that can be applied to a conductor without breaking through the insulation.

Hypalon® Dupont's trade name for their chlorosulfinated polyethylene, and ozone resistant synthetic rubber.*

Impedance The total opposition that a circuit offers to the flow of alternating current or any other varying current at a particular frequency. It is a combination of resistance R and reactance X, measured in ohms.

Inductance The property of a circuit or circuit element that opposes a change in current flow, thus causing current changes to lag behind voltage changes. It is measured in henrys.

Insulation A material having high resistance to the flow of electric current. Often called a dielectric in radio frequency cable.

Insulation Resistance The ratio of the applied voltage to the total current between two electrodes in contact with a specific insulation, usually expressed in megohms-M feet.

ISP/IEC 11801 An international standard for generic cabling system. Very similar to the ANSI/TIA/EIA 568A.

Jacket An outer non-metallic protective covering applied over an insulated wire or cable.

Kilo A numerical prefix denoting 1000 (10^3).

Lay The length measured along the axis of a wire or cable required for a single strand (in stranded wire) or conductor (in cable) to make one complete turn about the axis of the conductor or cable.

Longitudinal Shield A tape shield, flat or corrugated, applied longitudinally with the axis of the core being shielded.

*Hypalon is a registered trademark of E.I. Dupont de Nemours and Co.

Glossary

Loop Resistance to Return Loss

Loop Resistance Sum of conductor resistance and shield resistance (DCR).

Loss Energy dissipated without accomplishing useful work.

Low Loss Dielectric An insulating material that has a relatively low dielectric loss, such as polyethylene or Teflon.

MHz MegaHertz (one million cycles per second). Formerly mc.

Meg or Mega A numerical prefix denoting 1,000,000 (10^6).

Micro A numerical prefix denoting one-millionth (10^{-6}).

Mil A unit used in measuring diameter of a wire or thickness of insulation over a conductor. One one-thousandth of an inch (.001").

Modulus of Elasticity The ratio of stress to strain in an elastic material.

Monomer The basic chemical unit used in building a polymer.

Mutual Capacitance Capacitance between two conductors when all other conductors including ground are connected together and then regarded as an ignored ground.

Nano A numerical prefix denoting one-billionth (10^{-9}).

National Electrical Code A consensus standard published by the National Fire Protection Association (NFPA) and incorporated in OSHA regulations.

Near End Crosstalk (NEXT) Crosstalk that occurs at the same end as the disturbed pair's receiver. Normally, this is the largest contributor of noise because the disturbing pair's transmitted signal is strongest at this point.

Network Interface Device (NID) Point of connection between networks.

OFHC Abbreviation for Oxygen-Free, High Conductivity copper. It has no residual deoxidant, 99.95% minimum copper content and an average annealed conductivity of 101%.

Ohm A unit of electrical resistance.

Outlet Cable Cable extending directly between the telecommunications outlet/connector and the distribution device.

Oxygen Index Percentage of oxygen necessary to support combustion in a gas mixture.

Pair-to-Pair Crosstalk The crosstalk measurement of a single disturbing pair. It can be made for NEXT or FEXT.

Patch Cable A length of cable with connectors on one or both ends to join telecommunications links.

Percent Conductivity Conductivity of a material expressed as a percentage of that of copper.

Periodicity The uniformly spaced variations in the insulation diameter of a transmission cable that result in reflections of a signal, when its wavelength or a multiple thereof is equal to the distance between two diameter variations.

Pick Distance between two adjacent crossover points of braid filaments. The measurement in picks per inch indicates the degree of coverage.

Pico A numerical prefix denoting one-trillionth (10^{-12}).

Pitch In flat cable, the nominal distance between the index edges of two adjacent conductors.

Plasticizer A Chemical agent added to plastics to make them softer and more pliable.

Polymer A material of high molecular weight formed by the chemical union of monomers.

Polyolefin Any of the polymers and copolymers of the ethylene family of hydrocarbons.

Power Sum (or PSum) Crosstalk A crosstalk measurement where the crosstalk from all adjacent disturbing pairs in a cable are mathematically summed to give a combined crosstalk value. It simulates the effects of multiple signals in a multi-pair cable or parallel transmission in a 4 pair cable. It can be made for NEXT, FEXT, or ELFEXT.

Quad shield Four layers of shielding.

RG/U "RG" is the military designation for "Radio Grade" coaxial cable, and "U" stands for "general Utility."

Rated Temperature The maximum temperature at which an electric component can operate for extended periods without loss of its basic properties.

Rated Voltage The maximum voltage at which an electric component can operate for extended periods without undue degradation or safety hazard.

Reflection Loss The part of a signal which is lost due to reflection of power at a line discontinuity.

Return Loss A measure of reflected energy of a transmitted signal due to impedance variations along the length of the cable plus the mismatch of the cable's impedance from a 100 ohm termination. Signal reflections cause insertion loss and can add noise to the circuit.

Glossary

Rope Lay Conductor to VSWR

Rope Lay Conductor A conductor composed of a central core surrounded by one or more layers of helically laid groups of wires.

Screened Twisted Pair (ScTP) A 100 ohm cable with an overall foil shield and drain wire.

Sheath The outer covering or jacket of a multiconductor cable.

Shield In cables, a metallic layer placed around a conductor or group of conductors to prevent electrostatic or electromagnetic interference between the enclosed wires and external fields.

Shield Effectiveness The relative ability of a shield to screen out undesirable radiation. Frequently confused with the term shield percentage, which it is not.

Skin Effect The phenomenon in which the depth of penetration of electric currents into a conductor decreases as the frequency increases.

Spark Test A test designed to locate pin-holes in the insulation of a wire or cable by application of a voltage for a very short period of time while the wire is being drawn through the electrode field.

Specific Gravity The ratio of the density (mass per unit volume) of a material to that of water.

Spiral Wrap The helical wrap of a tape or thread over a core.

Strand A single uninsulated wire.

Stranded Conductor A conductor composed of groups of wires twisted together.

Strip Force The force required to remove a small section of insulation material from the conductor it covers. Usually measured in pounds.

Structural Return Loss (SRL) A measure of reflected energy of a transmitted signal due entirely to impedance variations along the length of the cable. Signal reflections cause insertion loss and can add noise to the circuit.

Surface Resistivity The resistance of a material between two opposite sides of a unit square of its surface. It is usually expressed on ohms.

Sweep Test Pertaining to cable, checking frequency response by generation an rf voltage whose frequency is varied back and forth through a given frequency range at a rapid constant rate and observing the results of an oscilloscope.

Tape Wrap A spirally applied tape over an insulated or uninsulated wire.

Tear Strength The force required to initiate or continue a tear in a material under specified conditions.

Telecommunication Outlet (TO) Point of connection for devices (TV, computer, fax, etc.) mounted within a wall, floor or ceiling.

Tensile Strength The pull stress required to break a wire/cable.

Tetra A numerical prefix denoting one quadrillionth (10^{-15}).

Transmission Cable Two or more transmission lines. If the structure is flat, it is sometimes called Flat Transmission Cable to differentiate it from a round structure such as a jacketed group of coaxial cables.

Tray A cable tray system is a unit or assembly of units or sections, and associated fittings, made of metal or other non-combustible materials forming a rigid structural system used to support cables. Cable tray systems (previously termed continuous rigid cable supports) including ladders, troughs, channels, solid bottom trays, and similar structures.

Triaxial Cable A cable construction having three coincident axes, such as conductor, first shield and second shield all insulated from one another.

Twisted Pair - Physical Media Dependent (TP-PMD) A Fiber Distributed Data Interface (FDDI) 100 Mb/s LAN standard that was adopted for twisted pair cable.

UHF Abbreviation for Ultra High Frequency, 300 to 3,000 MHz.

UL. Abbreviation for Underwriters Laboratories, a nonprofit independent organization, which operates a listing service for electrical and electronic materials and equipment.

Velocity of Propagation The speed of an electrical signal down a length of cable compared to speed in free space expressed as a percent. It is the reciprocal of the square root of the dielectric constant of the cable insulation.

VHF Abbreviation for Very High Frequency, 30 to 300 MHz.

VSAT Abbreviation for Very Small Aperture Terminal, a small data satellite dish..

Video Pair Cable A transmission cable containing low-loss pairs with an impedance of 125 ohms. Used for TV pick ups, closed circuit TV, telephone carrier circuits, etc.

Volt A unit of electromotive force.

Voltage Rating The highest voltage that may be continuously applied to a wire in conformance with standards or specifications.

Voltage Standing Wave Ratio (VSWR) The ratio of the maximum effective voltage to the minimum effective voltage measured along the length of a mis-matched radio frequency transmission line.

VSWR Abbreviation for voltage standing wave ratio.

VW-1 A flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designed vertical flame test, formerly designed FR-1.

Wall Thickness The thickness of the insulation or jacket.

Watt A unit of electric power.

Wave Length The distance, measured in the direction of propagation, of a repetitive electrical pulse or waveform between two successive points that are characterized by the same phase of vibration.

Wire A conductor, either bare or insulated.